SERVICE MANUAL

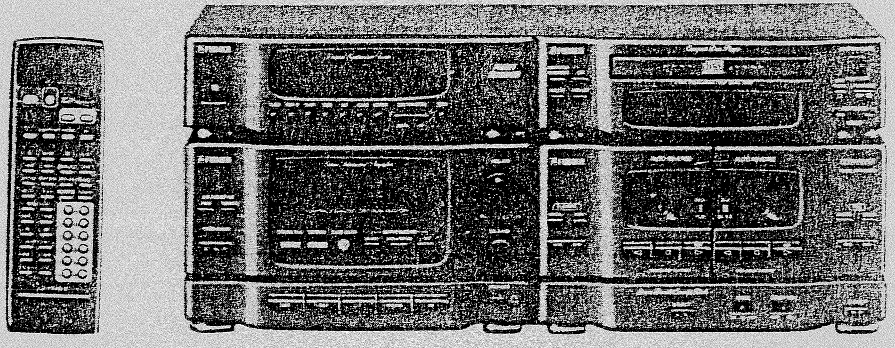
FISHER

TAD-G5

(GERMANY) (SPAIN)

CD Mini Component System

This Service manual is consist of "REM-M44", "FM-G5", "AD-G5", "CR-WG5", "CA-G5".



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PRODUCT CODE No.
129 364 06 (Germany / White)
129 364 07 (Germany / Black)
129 364 08 (Spain / Black)

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REFERENCE No. WM-580633

SPECIFICATION

Tuner (FM-G5)

Frequency range	FM : 87.5 - 108 MH
	MW : 522 - 1,611 kHz
	LW : 144 -290 kHz
Sensitivity	FM : 1.8μV (mono)
Dimensions(approx.)	220 (W) x 65 (H) x 250 (D) mm
Weight(approx.)	1.4 kg

Amplifier (CA-G5)

Output power	25 W x 2 (0.9% THD)
Inputs/outputs	Audio input x 2
	Audio output x 1
	Video input x 1
	Video output x 1
Graphic equalizer	7 band electronic
Spectrum analyzer	7 band
Dimensions(approx.)	220 (W) x 120 (H) x 250 (D) mm
Weight(approx.)	4.65 kg

Cassette decks (CR-WG5)

Track system	4-track, 2-channel stereo
Frequency response	Metal tapes : 40 - 15,000 Hz
	Chrome tapes : 40 - 14,000 Hz
	Normal tapes : 40 - 13,000 Hz
Signal to noise ratio	60 dB(with DOLBY NR : ON)
Wow and flutter	0.12% (WRMS)
Fast forward / rewind time	Approx. 110 sec. (C-60)
Dimensions(approx.)	220 (W) x 120 (H) x 250 (D) mm
Weight(approx.)	2.5 kg

CD player (AD-G5)

Channels	2-channel stereo
Sampling frequency	44.1 kHz
Pick-up	Optical 3-beam semiconductor laser
Frequency response	5 - 20,000 Hz
Wow and flutter	Below measurable limits
Dimensions(approx.)	220 (W) x 65 (H) x 250 (D) mm
Weight(approx.)	1.75 kg

General

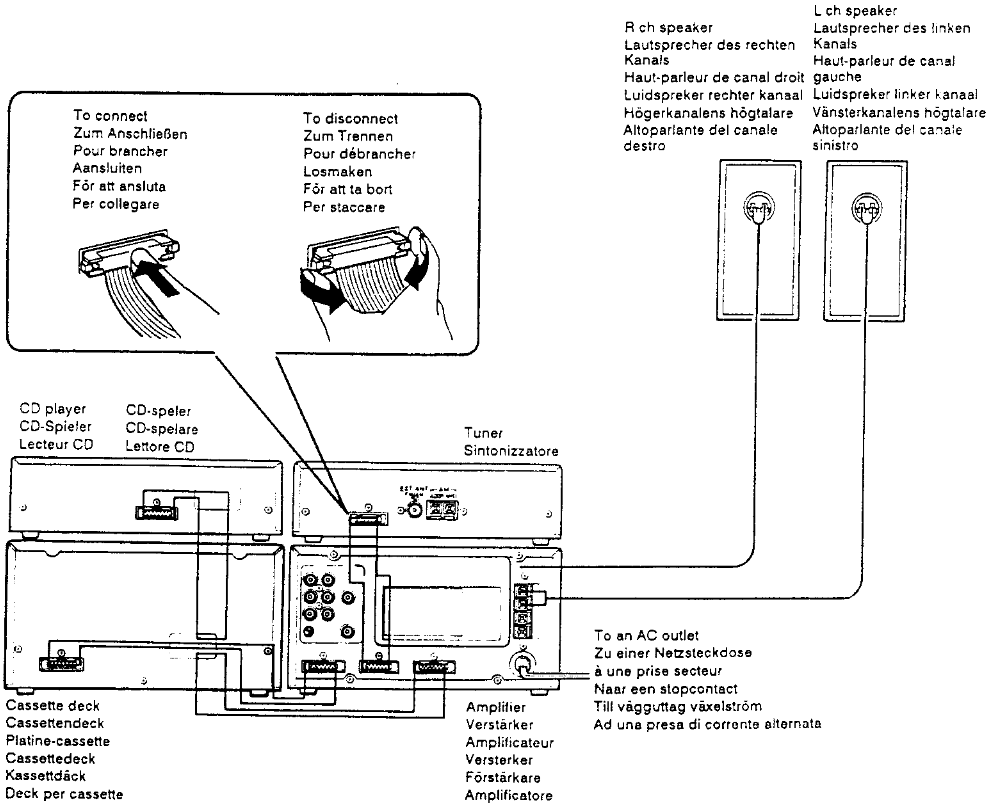
Power requirements	AC : 230V(115V), 50Hz
Power consumption	115W

Remote Controller (REM-M44)

Power requirements	DC : 3V
	"R6 / AA / SUM-3" Battery x 2
Dimensions(approx.)	58 (W) x 18 (D) x 186 (H) mm

Specification subject to change without notice.

SYSTEM CONNECTION


R ch speaker
Lautsprecher des rechten Kanals
Haut-parleur de canal droit
Luidspreker rechter kanaal
Högerkanalens högtalare
Altoparlante del canale destro
L ch speaker
Lautsprecher des linken Kanals
Haut-parleur de canal gauche
Luidspreker linker kanaal
Vänsterkanalens högtalare
Altoparlante del canale sinistro
To connect
Zum Anschließen
Pour brancher
Aansluiten
För att ansluta
Per collegare
To disconnect
Zum Trennen
Pour débrancher
Losmaken
För att ta bort
Per staccare
CD player
CD-Spieler
Lecteur CD
CD-speler
CD-spelare
Lettore CD
Tuner
Sintonizzatore
To an AC outlet
Zu einer Netzsteckdose
à une prise secteur
Naar een stopcontact
Till vägguttag växelström
Ad una presa di corrente alternata
Cassette deck
Cassettendeck
Platine-cassette
Cassettedeck
Kassettdäck
Deck per cassette
Amplifier
Verstärker
Amplificateur
Versterker
Förstärkare
Amplificatore

PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.
NOTE : This model has two difference colors. (B) : Black · (W) : White

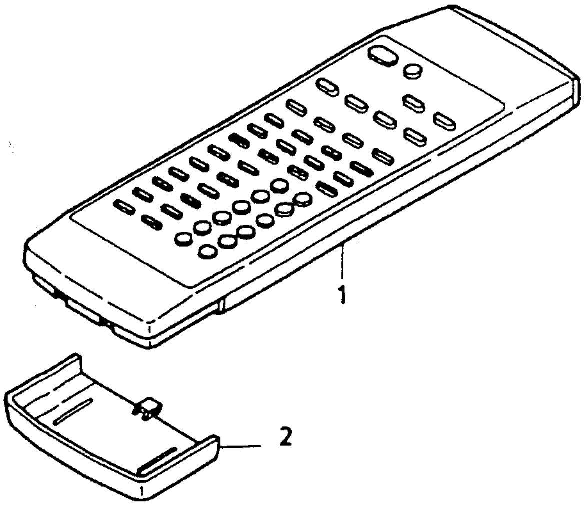
PACKING & ACCESSORIES

REF.NO.	PART NO.	DESCRIPTION
	614 237 1459	INNER CARTON(SPAIN)
	614 236 2945	INNER CARTON(B)
	614 236 2938	INNER CARTON(W)
	614 228 8825	PAD,TOP
	614 228 8832	PAD,BOTTOM
	614 223 3917	POLY COVER,REMOCON
	614 230 1135	POLY COVER,TUNER
	614 229 4000	INNER POLYE LAMINA COVER,CD
	614 176 8786	INNER POLYE LAMINA COVER,DECK
	614 176 8793	INNER POLYE LAMINA COVER,AMP
	614 176 3255	INNER POLYE COVER,INST·ACCESORY
	614 176 1039	INNER POLYE COVER,SCREW
	614 236 2976	INSTRUCTION MANUAL(GERMANY)

REF.NO.	PART NO.	DESCRIPTION
	614 237 1466	INSTRUCTION MANUAL(SPAIN)
	614 231 6832	LABEL,SAFETY,LASER,CD
	614 229 6929	SHEET,CD TRAY
	614 226 7387	ASSY,CONNECTOR-P,15P BLACK, AMP.-DECK
	614 227 2640	ASSY,CONNECTOR-P,13P BLACK, AMP.-TUNER
	614 227 2633	ASSY,CONNECTOR-P,15P BLUE, AMP.-CD
	614 208 7565	LOOP ANT,AM
	614 212 2341	MOUNT-E,AM ANT
	614 023 7344	ANT,FM
	411 083 9307	SCR WOOD RND 3.1X13,AM ANT

REMOTE CONTROLLER UNIT (REM-M44)

EXPLODED VIEW & PARTS LIST



REMOCON (REM-M44)

REF.NO.	PART NO.	DESCRIPTION
	614 235 8443	ASSY,REMOTE CONTROLLER
1	614 235 8368	ASSY,REMOCON — [illegible]
2	614 223 3764	LID,BATTERY

TUNER UNIT (FM-G5)

TUNER ADJUSTMENT

- Use a plastic screwdriver for adjustment.
- Adjust the intermediate frequency of AM and FM to the frequency of ceramic filter.

1. CLOCK

STEP	ITEMS	OUTPUT CONDITION		PARTS	STANDARDS
		MEASURE	OUTPUT		
1	CLOCK	Frequency Counter	IC242 Pin 33(H) Earth(E)	CT241	1.048576MHz (20°C)

①. Short the IC242 pin 40 and D2048 anode at power off.

②. Output the clock signal for adjustment.

③. Clock signal for adjustment delete at power on.

Temperature drift
10°C : about +1.5Hz, 30°C : about -2.5Hz, 40°C : about -5Hz,

2. FM BAND

SG RF Level : 75 ohm Open voltage
Antenna : 75 ohm Direct, Modulation : 1kHz, Dev. : ±75kHz (mono / stereo) · ±67.5kHz (main) · ±6.75kHz(pilot)

STEP	ITEMS	TUNING FREQUENCY	INPUT CONDITION		OUTPUT CONDITION		PARTS	STANDARDS
			MEASURE	INPUT	MEASURE	OUTPUT		
1	COVER	108.0MHz	------	------	Digital Voltmeter	TP241(H) TP232(E)	------	Confirm ≦8.0V
2	IF(0V)	98.0MHz (66dB)	FM SG	ANT TERMINAL	Digital Voltmeter	TP221(H) #TP222(E)	T2202	0±0.05V
3	VCO	98.0MHz (66dB)	FM SG	ANT TERMINAL	Frequency Counter	TP231(H) TP232(E)	SVR23	##19KHz±50Hz
4	SEPARATION	98.0MHz (66dB)	FM SG	ANT TERMINAL	VTVM Oscilloscope	TP233(L) TP234(R) TP235(E)	SVR24	L-R · R-L : Minimum DEV(MAIN) = ±40kHz
5	SD (Auto Stop)	98.0MHz (26dB)	FM SG	ANT TERMINAL	Digital Voltmeter	TP223(H) TP232(E)	SVR21	1~3V

: TP222 is no earth point. ## : Adjust in the modulation off after the stereo indicator light on.

3. MW BAND

Antenna : IRE Loop, Modulation : 400Hz 30%

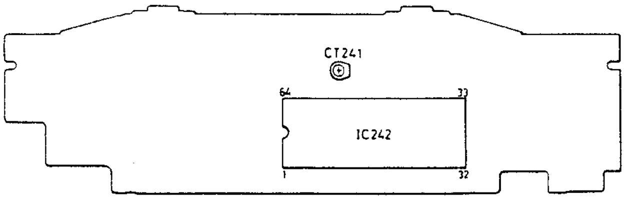
STEP	ITEMS	TUNING FREQUENCY	INPUT CONDITION		OUTPUT CONDITION		PARTS	STANDARDS
			MEASURE	INPUT	MEASURE	OUTPUT		
1	COVER	522kHz 1611kHz	------	------	Digital Voltmeter	TP241(H) TP232(E)	L2153 ------	1.2±0.05V Confirm ≦8.0V (about 7.6V)
2	TRACKING	603kHz 1404kHz	AM SG	LOOP ANT	VTVM Oscilloscope	TP233(L) TP234(R) TP235(E)	L2151 CT251	Output : Maximum Adjust to near the effective sensitivity.
3	SD (Auto Stop)	999kHz (85dB)	AM SG	LOOP ANT	Digital Voltmeter	TP223(H) TP232(E)	SVR22	1~3V

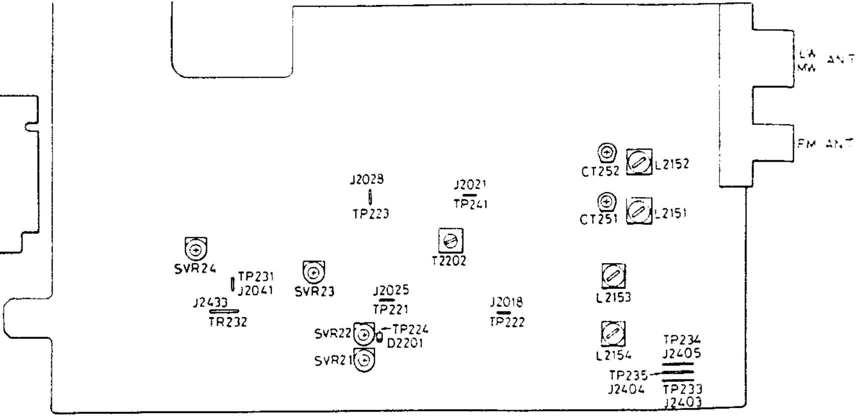
4. LW BAND

Antenna : IRE Loop, Modulation : 400Hz 30%

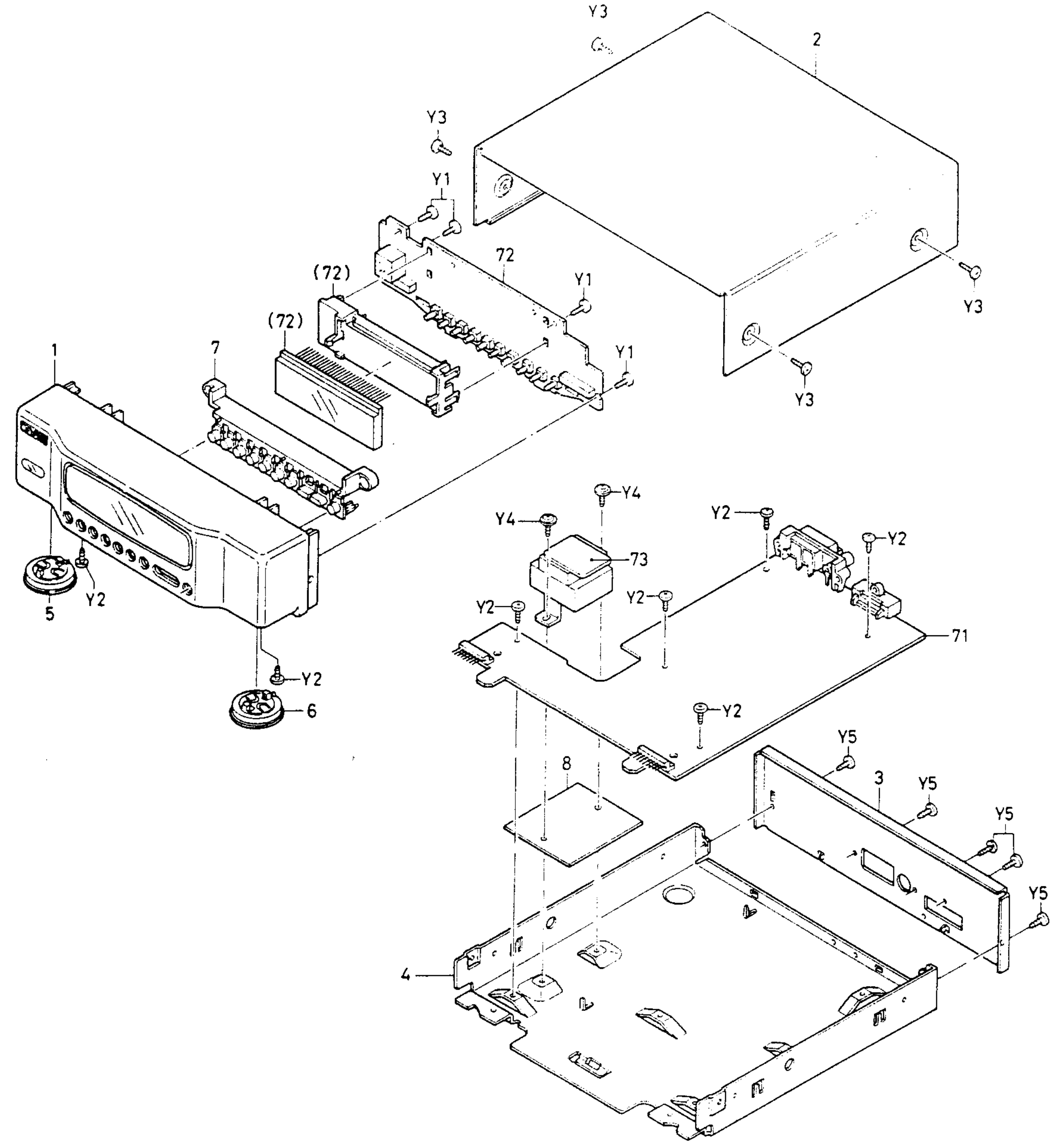
STEP	ITEMS	TUNING FREQUENCY	INPUT CONDITION		OUTPUT CONDITION		PARTS	STANDARDS
			MEASURE	INPUT	MEASURE	OUTPUT		
1	COVER	144kHz 290kHz	------	------	Digital Voltmeter	TP241(H) TP232(E)	L2154 ------	1.6±0.05V Confirm ≦8.0V (about 7.2V)
2	TRACKING	162kHz 279kHz	AM SG	LOOP ANT	VTVM Oscilloscope	TP233(L) TP234(R) TP235(E)	L2152 CT252	Output : Maximum Adjust to near the effective sensitivity.

4. PARTS LOCATION





EXPLODED VIEW (TUNER)



PARTS LIST (TUNER)

CABINET & CHASSIS (FM-G5)

REF.NO.	PART NO.	DESCRIPTION
1	614 236 1191	ASSY,PANEL,FRONT(B)
	614 236 1184	ASSY,PANEL,FRONT(W)
2	614 227 0974	ASSY,CABINET(B)
	614 236 1986	ASSY,CABINET(W)
3	614 236 2174	PANEL,REAR
4	614 227 5658	ASSY,CABINET,BOTTOM
5	614 234 7218	ASSY,FOOT,FRONT-L
6	614 234 7225	ASSY,FOOT,FRONT-R
7	614 236 2228	BUTTON,OPERATION(W)
	614 227 1650	BUTTON,OPERATION(B)
8	614 229 0859	SHIELD,TRANS

FIXING PARTS (FM-G5)

REF.NO.	PART NO.	DESCRIPTION
Y1	411 021 3107	SCR S-TPG BIN 2.6X8
Y2	411 021 6405	SCR S-TPG BIN 3X8
Y3	411 021 6603	SCR S-TPG BIN 3X8(B)
	411 098 4205	SCR S-TPG BIN 3X8(W)
Y4	411 020 9902	SCR S-TPG BRZ+FLG 3X8
Y5	411 021 3503	SCR S-TPG BIN 3X10

PARTS LIST (TUNER)

TUNER MAIN P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 229 9500	ASSY.PCB.MAIN
	620 208 3087	TUNER PACK.FM
C2151	403 082 2001	POLYPRO 470P J 100V
C2154	403 082 2205	POLYPRO 560P J 100V
C2314	403 080 5000	POLYPRO 1000P J 100V
C2401	403 196 9602	DL-ELECT 0.047F Z 5.5V
C2402	403 019 0403	CERAMIC 24P J 50V NPO
C2403	403 019 0403	CERAMIC 24P J 50V NPO
C2433	403 106 1603	NP-ELECT 1U Q 50V
C2904	403 197 7300	ELECT 1000U M 25V
CF221	614 030 5128	I.F FILTER.FM
CF222	614 030 5128	I.F FILTER.FM
CF223	614 030 5128	I.F FILTER.FM
CF224	614 210 4675	FILTER.AM(CF224+CF225)
OR	614 211 2939	FILTER.AM
CF225	614 030 7443	I.F FILTER.AM
CN101	614 210 2688	TERMINAL.FM(DIM)+PUSH 2P. EXT-ANT
CN290	614 227 2961	SOCKET.13P.TO AMP UNIT
CN291	614 035 4980	SOCKET.9P.TO POWER TRANS PCB
CN292	614 225 6428	PLUG.10P.TO FRONT PCB
CN293	614 225 6442	PLUG.12P.TO FRONT PCB
CT251	614 007 6356	TRIMMER.11PF(WH).MW
CT252	614 007 6332	TRIMMER.30PF(GR).LW
D2151	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2152	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2201	407 007 9904	DIODE GMA01
D2301	407 007 9904	DIODE GMA01
D2302	407 007 9904	DIODE GMA01
D2401	407 007 9904	DIODE GMA01
D2410	407 007 9904	DIODE GMA01
D2411	407 005 4505	DIODE DS442X
D2901	⚠407 004 9105	DIODE DSF10C
D2902	⚠407 004 9105	DIODE DSF10C
D2903	⚠407 004 9105	DIODE DSF10C
D2905	407 051 6102	ZENER DIODE GZS33Y
D2907	⚠407 053 7206	ZENER DIODE MTZ6.2C
D2908	407 053 5905	ZENER DIODE MTZ4.7C
IC221	409 016 2204	IC LA1265S
IC231	409 016 9500	IC LA3361
IC241	409 066 7600	IC LM7001
IC291	⚠409 078 1405	IC L78M12ML
OR	⚠409 078 2402	IC L7812ML
L2121	614 034 7128	VHF COIL.AM-RF
L2122	614 034 7128	VHF COIL.AM-RF
L2151	614 032 8059	ANT COIL.MW
L2152	614 216 1029	TRANS.RF.LW
L2153	614 033 8904	O.S.C COIL.MW
L2154	614 034 1003	O.S.C COIL.LW
L2201	614 028 4379	FILTER.AM
Q2103	405 016 5900	TR 2SC2999-E-SPA
Q2151	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U
Q2152	405 021 0600	TR 2SD1012-G-SPA
Q2153	405 021 0600	TR 2SD1012-G-SPA
Q2154	405 021 0600	TR 2SD1012-G-SPA
Q2155	405 021 0600	TR 2SD1012-G-SPA
Q2156	405 021 0600	TR 2SD1012-G-SPA
Q2157	405 026 9004	TR 2SK222-D
Q2158	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U
Q2201	405 016 0806	TR 2SC2839-E
Q2202	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U
Q2203	405 003 5302	TR 2SA1317-T
Q2301	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U
Q2302	405 017 9600	TR 2SC3330-T

REF.NO.	PART NO.	DESCRIPTION
Q2302	405 017 9709	TR 2SC3330-U
Q2351	405 003 5302	TR 2SA1317-T
Q2352	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U
Q2353	405 021 0600	TR 2SD1012-G-SPA
Q2354	405 021 0600	TR 2SD1012-G-SPA
Q2403	405 003 5708	TR 2SA1318-T
Q2404	405 003 5708	TR 2SA1318-T
Q2405	405 003 5708	TR 2SA1318-T
Q2431	405 010 9607	TR 2SC1571-F-NP
Q2432	405 010 9607	TR 2SC1571-F-NP
Q2902	⚠405 018 0101	TR 2SC3331-T
Q2951	405 017 9600	TR 2SC3330-T
R2407	⚠401 019 9303	CARBON 47 JB 1/4W
R2902	⚠401 018 2909	CARBON 330 JB 1/4W
R2911	⚠401 018 1704	CARBON 33 JB 1/4W
SVR21	614 203 6617	SEMI-FIXED V.R.22K OHM(B)
SVR22	614 203 6594	SEMI-FIXED V.R.10K OHM(B)
SVR23	614 203 6594	SEMI-FIXED V.R.10K OHM(B)
SVR24	614 203 6532	SEMI-FIXED V.R.1K OHM(B)
T2202	614 030 4114	I.F.T.FM
T2203	614 029 3906	MX COIL.FM
T2301	614 027 7845	CHOKE.TRAP
T2302	614 027 7845	CHOKE.TRAP
X2401	614 204 0317	CRYSTAL.7.2MHZ

TUNER FRONT P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 229 9517	ASSY.PCB.DISP/SW
	614 227 1872	MOUNT-E.FL
CN295	614 221 9102	SOCKET.10P.TO MAIN PCB
CN296	614 221 9126	SOCKET.12P.TO MAIN PCB
CT241	614 007 6332	TRIMMER.30PF(GR).CLOCK
D2402	407 007 9904	DIODE GMA01
D2403	407 007 9904	DIODE GMA01
D2404	407 007 9904	DIODE GMA01
D2405	407 007 9904	DIODE GMA01
D2406	407 007 9904	DIODE GMA01
D2407	407 007 9904	DIODE GMA01
D2408	407 007 9904	DIODE GMA01
D2420	407 007 9904	DIODE GMA01
FL241	614 226 7561	FLUORESCENT TUBE.FOR TUNER
IC242	410 112 7406	IC HD404728A34S
L2401	614 028 4256	FILTER.100UH.CHOCK(RIPPLE)
Q2451	405 003 5302	TR 2SA1317-T
RA241	614 218 0433	RESISTOR 100K X5
S2401	614 220 5655	SWITCH.TACT.CLEAR
S2402	614 220 5655	SWITCH.TACT.SLEEP
S2403	614 220 5655	SWITCH.TACT.WAKE UP
S2404	614 220 5655	SWITCH.TACT.TIMER
S2405	614 220 5655	SWITCH.TACT.CLOCK
S2406	614 220 5655	SWITCH.TACT.BAND
S2407	614 220 5655	SWITCH.TACT.SET
S2408	614 220 5655	SWITCH.TACT.MEMORY
S2409	614 220 5655	SWITCH.TACT.UP
S2410	614 220 5655	SWITCH.TACT.DOWN
S2441	407 138 4700	PHOTO CONNECTOR.REMOCON RECIEVER
X2402	614 229 3294	RESONATOR.4.19MHZ

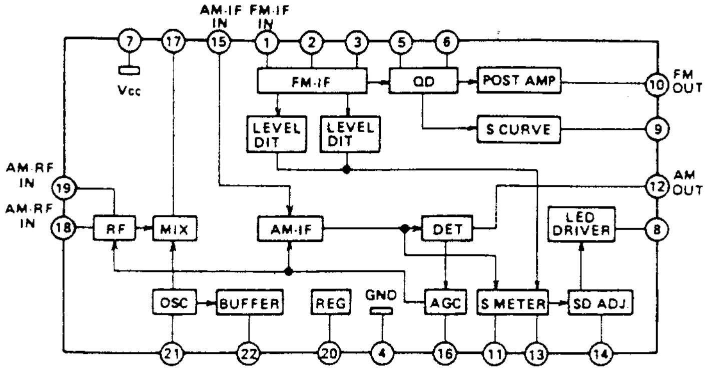
POWER TRANSFORMER P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 229 9524	ASSY.PCB.POWER TRANS
CN292	614 035 4980	SOCKET.9P.TO MAIN PCB
PT291	⚠614 231 8782	POWER TRANSFORMER

MEMO

IC BLOCK DIAGRAM (TUNER)

IC221 LA1265(Tuner System)


AM·IF IN
FM·IF IN
Vcc
FM·IF
QD
POST AMP
FM OUT
LEVEL DIT
LEVEL DIT
S CURVE
AM·RF IN
AM·RF IN
AM OUT
RF
MIX
AM·IF
DET
LED DRIVER
OSC
BUFFER
REG
GND
AGC
S METER
SD ADJ
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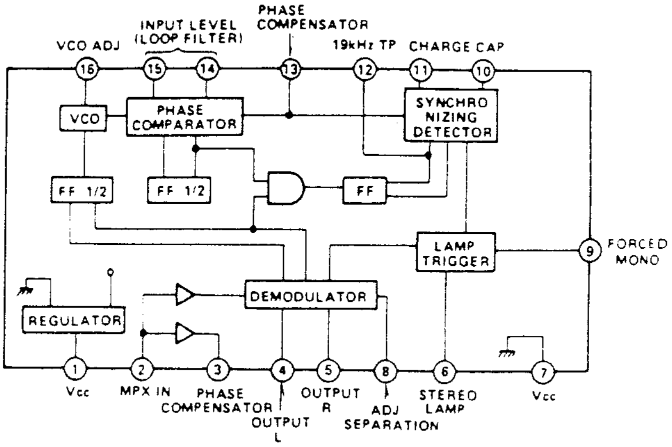
IC231 LA3361(PLL FM MPX. Stereo Demodulator)


PHASE COMPENSATOR
INPUT LEVEL (LOOP FILTER)
VCO ADJ
19kHz TP
CHARGE CAP
VCO
PHASE COMPARATOR
SYNCHRO NIZING DETECTOR
FF 1/2
FF 1/2
FF
LAMP TRIGGER
FORCED MONO
REGULATOR
DEMODULATOR
Vcc
MPX IN
PHASE COMPENSATOR
OUTPUT L
OUTPUT R
ADJ SEPARATION
STEREO LAMP
Vcc
16
15
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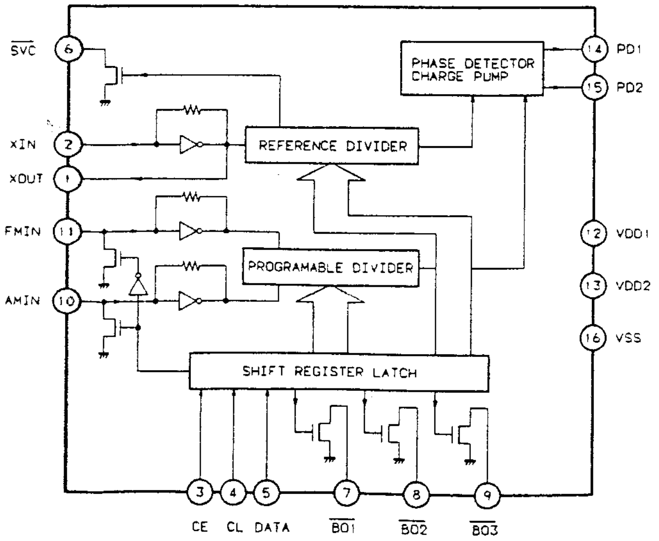
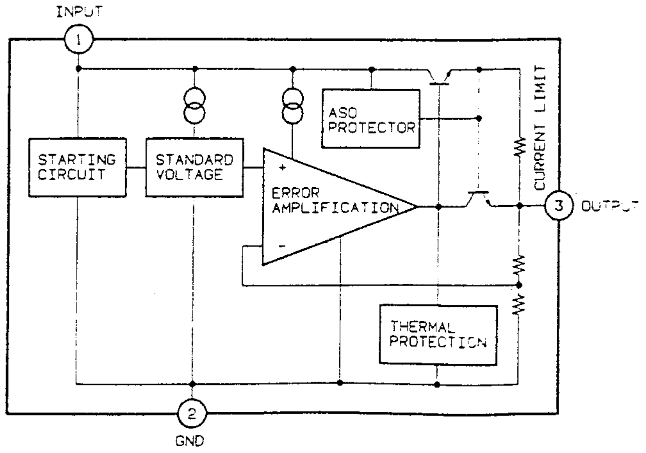
IC241 LM7001(Pre-Scaler)


SVC
XIN
XOUT
FMIN
AMIN
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
PROGRAMABLE DIVIDER
SHIFT REGISTER LATCH
PD1
PD2
VDD1
VDD2
VSS
CE
CL
DATA
BO1
BO2
BO3
6
2
1
11
10
14
15
12
13
16
3
4
5
7
8
9

IC291 L78M12ML(3-Terminal Voltage Regulator)


INPUT
1
STARTING CIRCUIT
STANDARD VOLTAGE
ASO PROTECTOR
ERROR AMPLIFICATION
+
-
CURRENT LIMIT
THERMAL PROTECTION
3
OUTPUT
2
GND

IC BLOCK DIAGRAM (TUNER)

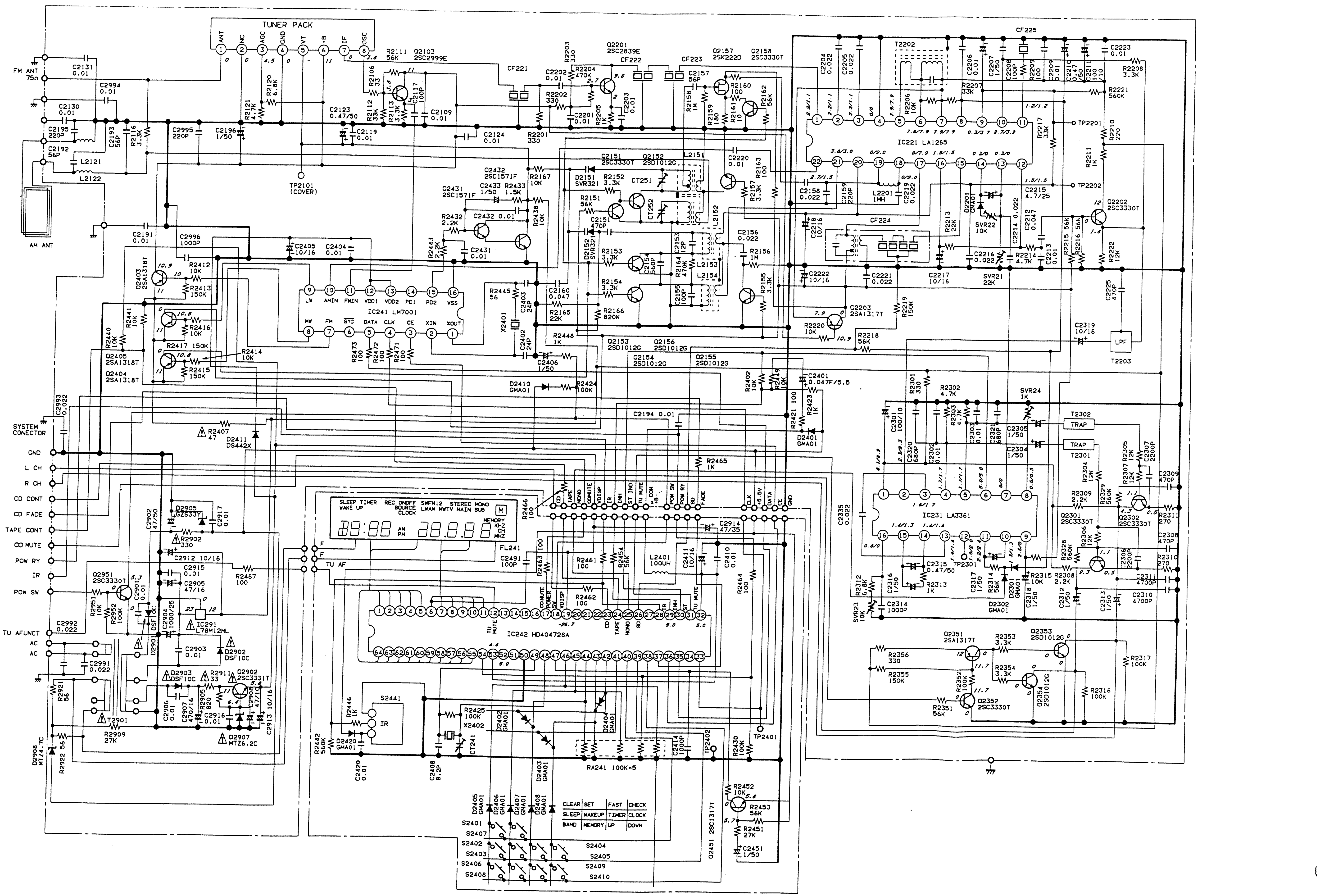
IC242 HD404728A34S (4-Bit Micro Processor)

A* :initial B* :Active Mode C* :Back Up

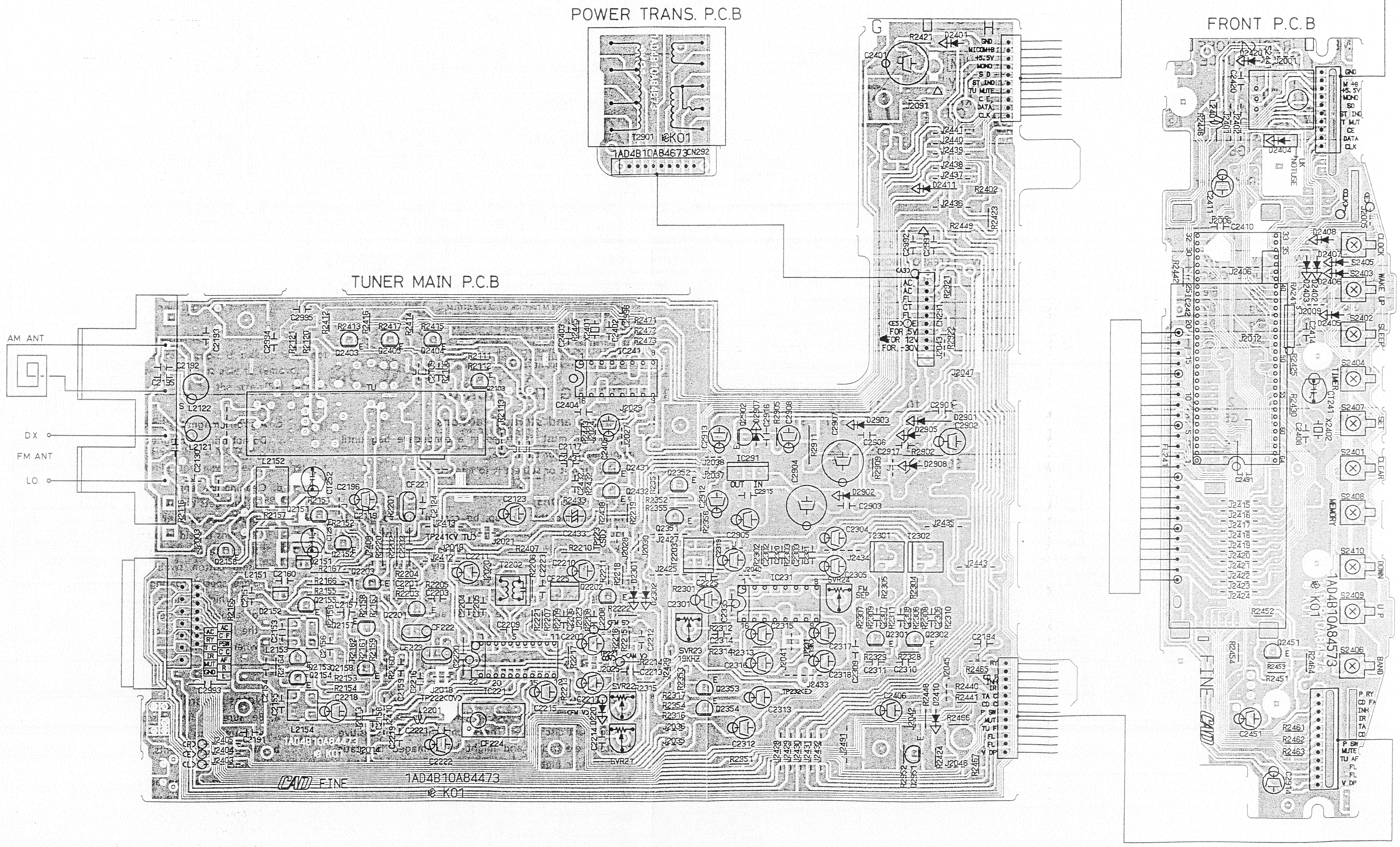
No	Pin name	Description High : ,Low :	A*	B*	C*
1	SEG.OUT5	FL segment output (SEG.OUT5)			
2	SEG.OUT4	FL segment output (SEG.OUT4)			
3	SEG.OUT3	FL segment output (SEG.OUT3)			
4	SEG.OUT2	FL segment output (SEG.OUT2)			
5	SEG.OUT1	FL segment output (SEG.OUT1)			
6	DIGIT OUT1	FL Digit output (DIG.OUT1)			
7	DIGIT OUT2	FL Digit output (DIG.OUT2)			
8	DIGIT OUT3	FL Digit output (DIG.OUT3)			
9	DIGIT OUT4	FL Digit output (DIG.OUT4)			
10	DIGIT OUT5	FL Digit output (DIG.OUT5)			
11	DIGIT OUT6	FL Digit output (DIG.OUT6)			
12	FUNCT4	FUNCTION SW signal output TUNER;,Hi PULSE	L	H	L
13	FUNCT3	FUNCTION SW signal output AUX;,Hi PULSE	L	H	L
14	FUNCT2	FUNCTION SW signal output VCR;,Hi PULSE	L	H	L
15	FUNCT1	FUNCTION SW signal output DAT;,Hi PULSE	L	H	L
16	-20dB MUTE	-20dB Muting output, ON/OFF→L/H	L	H	L
17	∞MUTE	∞Muting output, ON/OFF→L/H	L	L	Hi-imp
18	POWER SW	POWER SW key input, Nrm.→H		L	
19	Vdisp	Power source for display			
20	VOLUP	Vol Up signal output, Norm.→L	L	H	L
21	VOLDOWN	Vol Down signal output Norm.→L	L	H	L
22	VOLIND	VOL indicator LED output, Norm.→H, VOL mode→flushing	H	H	L
23	CD CONT	CD Control output, Timer;CD start→H, Norm.→L level	L	H	L
24	TAPE CONT	TAPE Control output, Timer and TAPE PLAY→L, TAPE REC→H, Norm.→Hi Impedance	Hi-imp	L/H	Hi-imp
25	FM MONO	FM compulsion monoral output, Stereo Auto.→L, Compulsion Mono.→H	L	H	L
26	TUNED/SD	TUNED/SD signal input		L	
27				L	
28	IR	Remote controller received signal			
29	INH	Inhibit AC PW detected, AC ON→, AC OFF→L		L	
30	STEREO IND	FM.STEREO received display input STEREO TIME→L level		L	

No	Pin name	Description High : ,Low :	A*	B*	C*
31	TU MUTE	TU Muting output Muting ON/OFF→H/L	H	H	Hi-imp
32	VCC	+Power source			
33	SCK	Clock signal output for data output to PLL IC			
34	SI				
35	SO	Data output to the PLL IC			
36	CE	Chip enable signal output to the PLL IC			
37	CD FADE CONT/OSC CHECK	CD Control output Norm: L, CD FADE IN·FADE OUT: H, PW OFF CHECK Key"1": Clock output for adjustment	L	H	L
38	KEY OUT1	Key Matrix output signal 1			
39	KEY OUT2	Key Matrix output signal 2			
40	KEY OUT3	Key Matrix output signal 3			
41	KEY OUT4	Key Matrix output signal 4			
42	KEY OUT5	Key Matrix output signal 5			
43	KEY IN1	Key Matrix input signal 1			
44	KEY IN2	Key Matrix input signal 1			
45	KEY IN3	Key Matrix input signal 1			
46	KEY IN4	Key Matrix input signal 1			
47	RESET	(RESET)			
48	OSC2	(X'tal connect)			
49	OSC1	(X'tal connect)			
50	GND	GND			
51	CL1				
52	CL2				
53	TEST				
54	POWER RY	POWER RELAY Control output Relay OFF:L Relay ON:H	L	H	Hi-imp
55	SEG.OUT15	FL segment output (SEG.OUT15)			
56	SEG.OUT14	FL segment output (SEG.OUT14)			
57	SEG.OUT13	FL segment output (SEG.OUT13)			
58	SEG.OUT12	FL segment output (SEG.OUT12)			
59	SEG.OUT11	FL segment output (SEG.OUT11)			
60	SEG.OUT10	FL segment output (SEG.OUT10)			
61	SEG.OUT9	FL segment output (SEG.OUT9)			
62	SEG.OUT8	FL segment output (SEG.OUT8)			
63	SEG.OUT7	FL segment output (SEG.OUT7)			
64	SEG.OUT6	FL segment output (SEG.OUT6)			

SCHEMATIC DIAGRAM (TUNER)

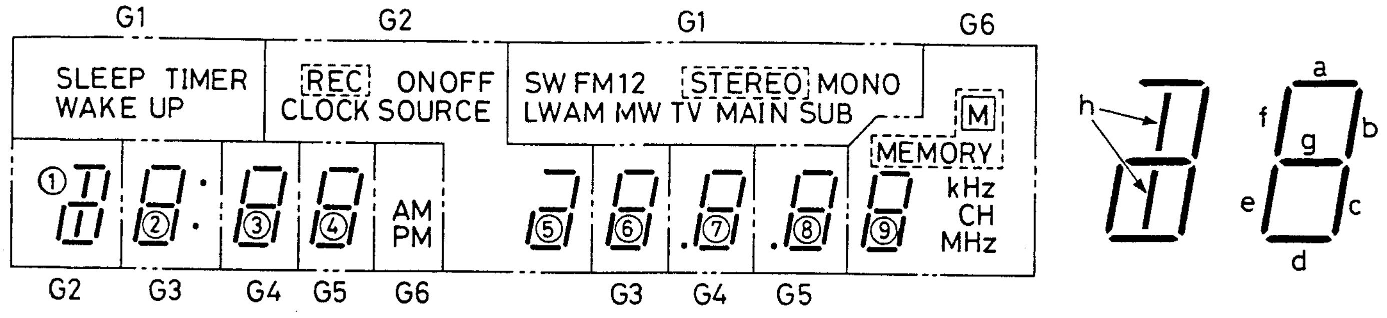

TUNER PACK
ANT
NC
AGC
GND
VT
+B
IF
OSC
FM ANT 75Ω
AM ANT
TP2101 (COVER)
Q2103 2SC2999E
Q2201 2SC2839E
Q2157 2SK222D
Q2158 2SC3330T
CF221
CF222
CF223
CF224
CF225
T2202
T2203
LPF
IC221 LA1265
Q2202 2SC3330T
Q2203 2SA1317T
TP2201
TP2202
Q2151 2SC3330T
Q2152 2SD1012G
D2151 SVR321
D2152 SVR321
CT251
CT252
L2151
L2152
L2153
L2154
Q2153 2SD1012G
Q2154 2SD1012G
Q2155 2SD1012G
Q2156 2SD1012G
Q2431 2SC1571F
Q2432 2SC1571F
IC241 LM7001
LW AMIN FMIN VDD1 VDD2 PD1 PD2 VSS
MW FM SYC DATA CLK CE XIN XOUT
X2401
Q2403 2SA1318T
Q2404 2SA1318T
Q2405 2SA1318T
D2410 GMA01
D2401 GMA01
D2411 DS442X
SYSTEM CONECTOR
GND
L CH
R CH
CD CONT
CD FADE
TAPE CONT
CD MUTE
POW RY
IR
POW SW
TU AFUNCT
AC
AC
D2905 GZS33Y
Q2951 2SC3330T
IC291 L78M12ML
D2901 DSF10C
D2902 DSF10C
D2903 DSF10C
Q2902 2SC3331T
D2907 MTZ6.2C
D2908 MTZ4.7C
T2901
SLEEP TIMER REC ONOFF SWFM12 STEREO MONO
WAKE UP SOURCE CLOCK LWAM MWTV MAIN SUB
MEMORY KHZ MHZ
AM PM
FL241
TU AF
IC242 HD404728A
CD TAPE MONO CDMUTE VDISP IR INH ST IND TU MUTE COM POW SW POW RY SD FADE CLK +5.8V DATA CE GND
S2441
IR
X2402
CT241
TP2401
TP2402
RA241 100K×5
D2402 GMA01
D2403 GMA01
D2404 GMA01
D2405 GMA01
D2406 GMA01
D2407 GMA01
D2408 GMA01
D2420 GMA01
Q2451 2SC1317T
CLEAR SET FAST CHECK
SLEEP WAKEUP TIMER CLOCK
BAND MEMORY UP DOWN
S2401 S2402 S2403 S2404 S2405 S2406 S2407 S2408 S2409 S2410
IC231 LA3361
SVR21
SVR22
SVR23
SVR24
T2301
T2302
TRAP
TP2301
Q2301 2SC3330T
Q2302 2SC3330T
D2301 GMA01
D2302 GMA01
Q2351 2SA1317T
Q2352 2SC3330T
Q2353 2SD1012G
Q2354 2SD1012G
L2201 1MH
L2401 100UH
L2121
L2122

WIRING DIAGRAM (TUNER)


POWER TRANS. P.C.B
T2901
1AD4B10A84673
CN292
K01
TUNER MAIN P.C.B
AM ANT
DX
FM ANT
LO
1AD4B10A84473
K01
FINE
FRONT P.C.B
GND
MICOM+B
+5.5V
MONO
S D
ST IND
TU MUTE
C E
DATA
CLK
AC
AC
FL
FL
CT
FOR 5V
FOR 12V
FOR -30V
CLOCK
WAKE UP
SLEEP
TIMER
SET
CLEAR
MEMORY
DOWN
UP
BAND
UK
NOT USE
1AD4B10A84573
K01
FINE
P SW
MUTE
TU AF
FL
FL
V DP

IC BLOCK DIAGRAM

FL241 (Tuner Fluorescent Display)


G1
G2
G1
G6
SLEEP TIMER
WAKE UP
REC
ON OFF
CLOCK SOURCE
SW FM 1 2
STEREO
MONO
LW AM MW TV MAIN SUB
M
MEMORY
①
②
③
④
AM
PM
⑤
⑥
⑦
⑧
⑨
kHz
CH
MHz
G2
G3
G4
G5
G6
G3
G4
G5
h
a
b
c
d
e
f
g

⬚:Red, ather Blue-green

Segment Map

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
G1	AM	SUB	MW	TV	SW	FM	1	2	MAIN	LW	STEREO	MONO	TIMER	SLEEP	WAKEUP
G2	OFF	ON	REC	SOURCE	CLOCK	⑤b	⑤adeg	⑤c	①a	①b	①h	①g	①e	①c	①d
G3	⑥a	⑥b	⑥f	⑥g	⑥e	⑥c	⑥d	:	②a	②b	②f	②g	②e	②c	②d
G4	⑦a	⑦b	⑦f	⑦g	⑦e	⑦c	⑦d	.	③a	③b	③f	③g	③e	③c	③d
G5	⑧a	⑧b	⑧f	⑧g	⑧e	⑧c	⑧d	.	④a	④b	④f	④g	④e	④c	④d
G6	⑨a	⑨b	⑨f	⑨g	⑨e	⑨c	⑨d	MEMORY		🄼	AM	PM	kHz	CH	MHz

Pin Assignment

PIN No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Segment Name	F	G6	G5	G4	G3	G2	G1	S15	S14	S13	S12	S11	S10

PIN No.	14	15	16	17	18	19	20	21	22	23	24	25
Segment Name	S9	NC	NC	S1	S2	S3	S4	S5	S6	S7	S8	F

CD PLAYER UNIT (AD-G5)

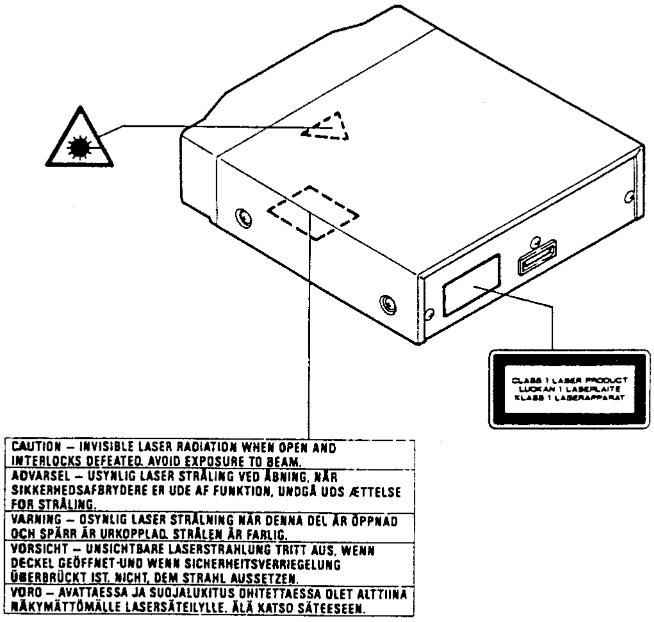
LASER BEAM SAFETY PRECAUTIONS

Do not look directly at the laser beam coming from the pick-up or allow it to strike against your fingers, skin, etc.
Do not apply power if there is a broken part in the laser output section of the pick-up.

Structural Safety Interlock

This model has a disc chuck lever and top lid. This disc chuck lever and top lid prevent to expose the laser beam for users.

INVISIBLE LASER RADIATION EXPOSURE TO BEAM IS DANGEROUS CLASS 1 LASER PRODUCT
OUTPUT POWER : 0.6 mW MAX WAVELENGTH : 790 nm


CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT
CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL – USYNLIG LASER STRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARNING – OSYNLIG LASER STRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.
VORSICHT – UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT, DEM STRAHL AUSSETZEN.
VORO – AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

CAUTION - USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

ACHTUNG - WENN ANDERE ALS DIE HIER SPEZIFIZIERTEN BEDIENUNGS- ODER JUSTIEREINRICHTUNGEN BENÜTZT ODER ANDERE VERFAHRENS-WEISEN AUSGEFÜHRT WERDEN, KANN DIES ZU GEFÄHRLICHER STRAHLUNGSEXPOSITION FÜHREN.

ATTENTION - L'EMPLOI D'ORGANES DE COMMANDE OU DE RÉGLAGE, OU L'EXÉCUTION DE PROCÉDURES, AUTRES QUE CEUX SPÉCIFIÉS DANS LE MODE D'EMPLOI, PEUT PROVOQUER UNE EXPOSITION DANGEREUSE AU RAYONNEMENT.

OPGELET - HET GEBRUIK VAN REGELAARS OF HET MAKEN VAN AFSTELLINGEN E.D. DIE NIET IN DEZE GEBRUIKSAANWIJZING ZIJN BESCHREVEN KAN LEIDEN TOT SCHADELIJKE STRALINGEN.

VARNING! OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN VAD SOM BESKEIV I DENNA BRUKSANVISNING, KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

CAUTELA - L'USO DI COMANDI, AGGIUSTAMENTI O PROCEDIMENTI DIVERSO DA QUELLO QUI SPECIFICATO PUÒ DAR LUOGO AD ESPOSIZIONE A RADIAZIONI PERICOLOSE.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

1. HANDLING THE PICK-UP

1. Shipping and storage cautions

a. The pick-up must be stored in a conductive bag until immediately prior to its use.
b. Do not drop it or subject it to impacts.

2. Repair cautions

a. When handling the pick-up, be careful not to give it undue force or shock by your hands. Otherwise the pick-up may malfunction or the PCB may be cracked.
b. The pick-up which has been minutely adjusted before shipment as one part. Never touch and move the adjusting points and setscrews of the pick-up unless otherwise described in the item of adjustment to avoid damage.

c. A strong magnet is used in the pick-up.
Do not bring a magnet or other magnetized object near to it.

d. Cleaning the lens
* If dust gets on the lens, clean it away by using an air brush such as used for a camera lens.
* The lens is held in place by a spring.
If the center of the lens is dirty, carefully clean it using cotton swab moistened with isopropylalcohol. Since special coating is made on the surface of the lens which is made of plastics, do not use other kind of alcohol and cleaning fluid to prevent damage to the lens. Also, be careful not to bend the lens spring when cleaning.

BEFORE REPAIRING THE CD PLAYER

1. Preparations

a. Many ICs, LSI and the Pick-up (laser diode) are used in the compact disc player. These components are sensitive to static electricity, and might be damaged by static electricity or high voltage, so particular care should be taken regarding this point.
b. Many precision components and the lens are used in the pick-up.
Never attempt to make repairs, or to store parts, where the temperature or humidity is high, where magnetism is strong, or where there is much dust.

2. Notes regarding repairs

a. Be sure to first disconnect the power plug before attempting to replace any component.
b. All tools, instruments, etc., used for measuring must be grounded.
Grounding can be accomplished by using a conductive metal sheet on the work bench.
c. To prevent AV leakage of the soldering iron, ground its metal part.
d. Repair personnel must be grounded.

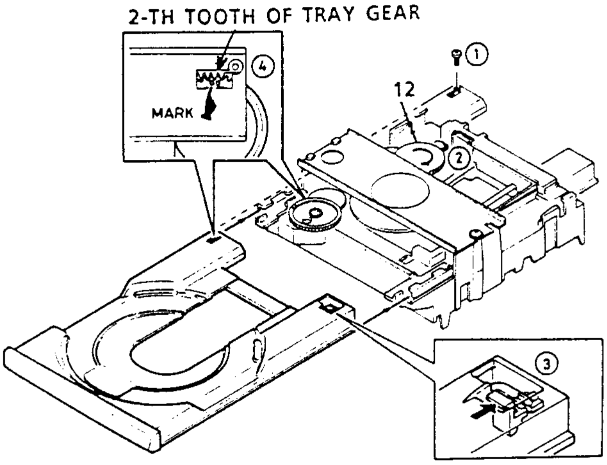
CD MECHANISM REMOVAL

1. PREPARATIONS

- When handling the pick-up, take care not to exert excessive force, and particular care should be taken not to touch the lens or the drive circuits printed circuit board pattern.
- When if disc tray was deep in, stop to pull the disc tray by force at hand and push from rear.
  Because it do so, break the teeth of Tray gear (6).

2. EXCHANGE THE DISC TRAY

1) Remove the screw. (①)
2) Turn right the Gear (12) and take to left end the disc tray. (②)
   Be not sure the disc tray to pull by force at hand.
3) Push forward the claw of disc tray, and pull out it. (③)
4) When mount the disc tray, Gear (12) to turn the right way of the arrow. (②)
5) Set the disc tray to put at mechanism chassis.
6) Being push the disc tray, confirm the Tray drive gear(3) and disc tray are closely gear with as figure.(④)
7) Fasten a screw. (①)

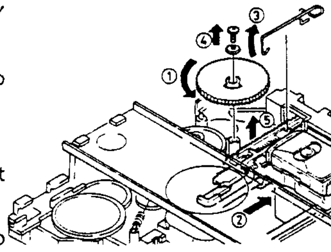

2-TH TOOTH OF TRAY GEAR
MARK
④
①
12
②
③

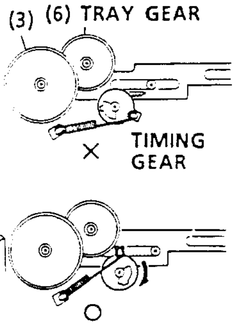
3. CD MECHANISM REMOVAL

(1) HOW TO PICK-UP BLOCK

1) Remove the disc tray. [See "2" EXCHANGE THE DISC TRAY 1),2),3)]
2) Take to left end the gear (12) and turn the pick-up left way to the arrow ②.
3) Remove the spring wire by tweezers. (③)
4) Continuously, remove the pick rack gear. If pick-up was not move a direction of the arrow ②, it is not able to remove.
5) If remove to fasten the pick-up block by the screw(51), pick-up block is removable.

# Set the timing gear to ○ condition.




TRAY MOVE GEAR (3)
(6) TRAY GEAR
×
TIMING GEAR
○

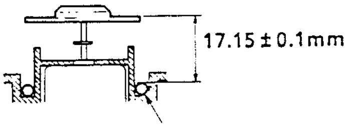
(2) HOW TO REPLACEMENT OF THE SPINDLE MOTOR

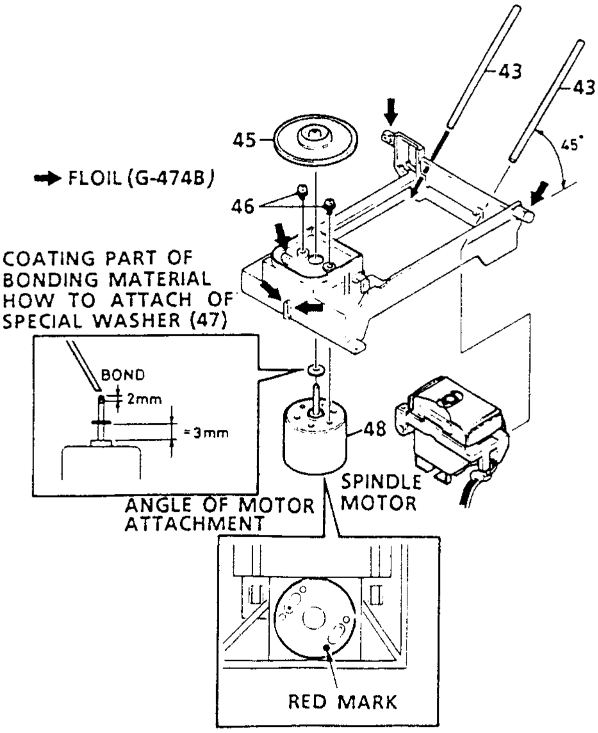
- First, prepare the new turntable and new special washer for replacement.
  The removed turntable will be formed by the heat of the soldering iron, and can not be reused.
- Prepare the dial-type calipers.

1) Attached bonding material can be dissolved by using a 60W soldering iron to heat the shaft at the top part of the Turntable(45) for about one minute.
2) Turntable (45) can then be removed from the shaft with very carefully applying force upward at the center of the lower surface of the turntable.
3) Remove the two screws (46) and remove the Spindle motor (48).
4) Wipe off the motor shaft from top to lower 10mm more by using a piece of cloth with methanol.
5) Attach the special washer (47) to the spindle motor.
6) Attach the motor to the chassis.
7) Apply a half of grain of rice to mount at the shaft about 2mm under from top.

Bonding materials are mixed with "Three Bond 2001" and "2105F" and mixture ratio is 1:1.

HOW TO ATTACH OF TURNTABLE


17.15 ± 0.1mm
SHAFT

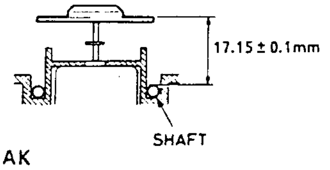

43
43
45°
45
➜ FLOIL (G-474B)
46
COATING PART OF BONDING MATERIAL
HOW TO ATTACH OF SPECIAL WASHER (47)
BOND
2mm
≈3mm
48
ANGLE OF MOTOR ATTACHMENT
SPINDLE MOTOR
RED MARK

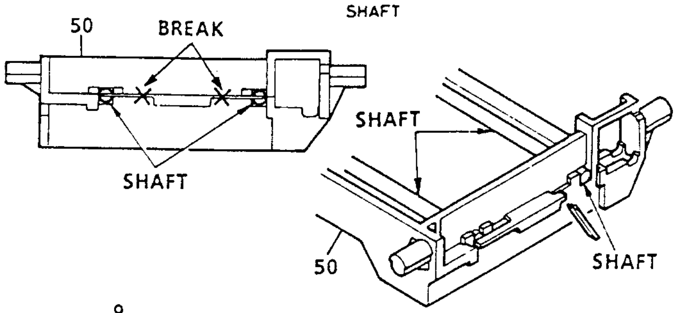
CD MECHANISM REMOVAL

8) Install the new turntable as shown in the right figure.
9) Secure the turntable by pressing gently.
10) Confirm any bonding material coming out of the upper face (hole) of the Turntable , if it do so be sure to attach the methanol and wipe away by using a piece of cloth or similar materials.

- Install the spindle motor as angle of previous page right below.
- Insert the shaft(43) as 45°angle.
  If broken the stopper wing, wipe the shaft by using a piece of cloth and apply the cemedine #575 and fix the chassis (50) and the shaft..

HOW TO ATTACH OF TURNTABLE

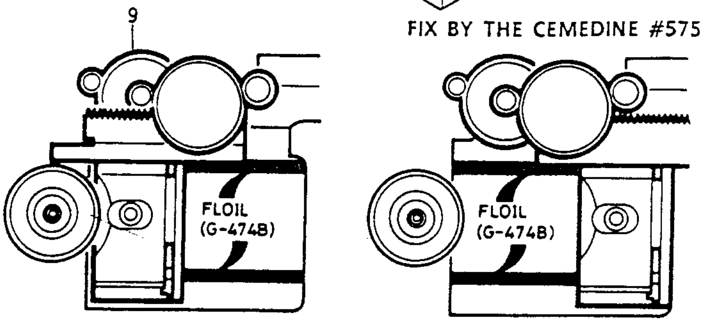

17.15 ± 0.1mm
SHAFT


50
BREAK
SHAFT
SHAFT
50
SHAFT

FIX BY THE CEMEDINE #575

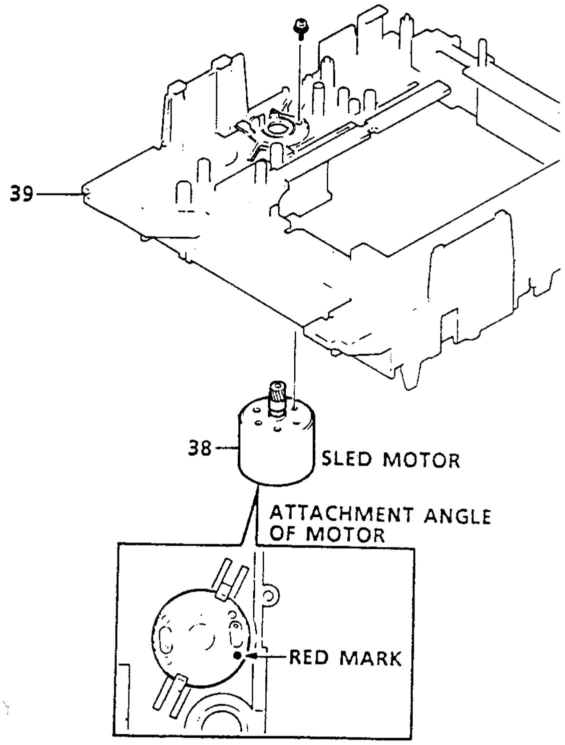
(3) REPLACEMENT AND LUBRICATION OF THE PICK-UP

1) Pull out the two shaft (pick-up rail) from chassis.
2) If the pick-up is reconditioned or replaced, be sure to wipe the rails and also apply a coating of FLOIL (G-474B) to their entire circumference and entire length.


9
FLOIL
(G-474B)
FLOIL
(G-474B)

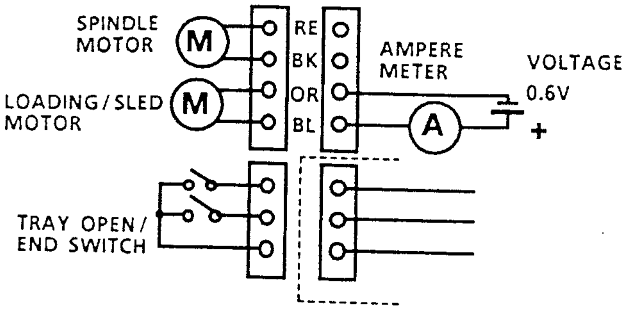
(4) REPLACEMENT OF THE SLED MOTOR

Remove the two pan-head screws that hold the motor, and then replace the motor (38).


39
38
SLED MOTOR
ATTACHMENT ANGLE
OF MOTOR
RED MARK

(5) CHECKING THE OPERATION OF THE SLED MOTOR (The state of disc tray remove)

1) Apply a voltage of 0.6V.
   Confirm the direction of movement of the pick-up to inner groove to outer groove can't stop and move it smoothly.
2) Apply a voltage of 4.0V and after loading and gear (9) is slip.
   Confirm the current 120mA or more to at this time.

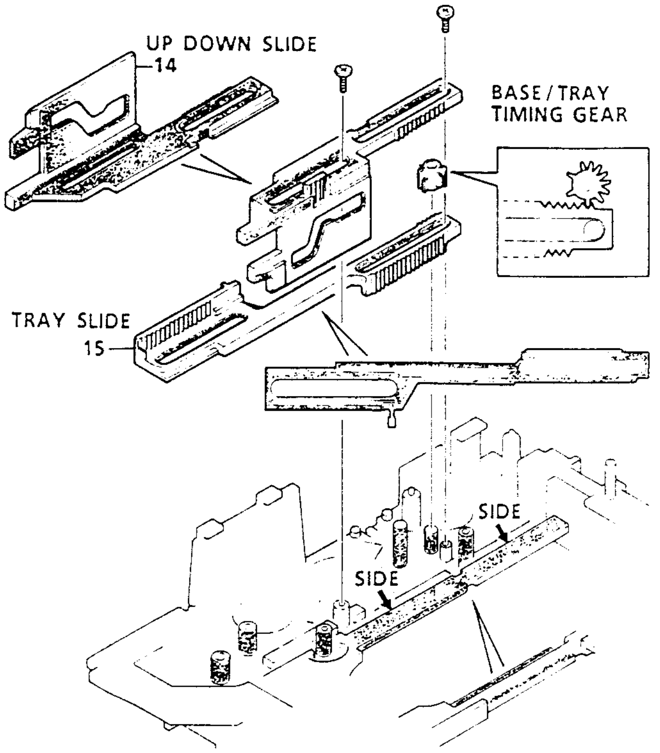

SPINDLE
MOTOR
M
LOADING/SLED
MOTOR
M
RE
BK
OR
BL
AMPERE
METER
A
VOLTAGE
0.6V
+
TRAY OPEN/
END SWITCH

4. CD MECHANISM ASSEMBLY & APPLY GREASE

(1) APPLY GREASE AND INSTALL THE TRAY SLIDE

1) Apply the grease FLOIL (G-474B) at part of right figure.

2) When insert a tray slide (15), set up the installation position with base and tray timing gear as follow figure.


UP DOWN SLIDE
14
BASE/TRAY
TIMING GEAR
TRAY SLIDE
15
SIDE
SIDE

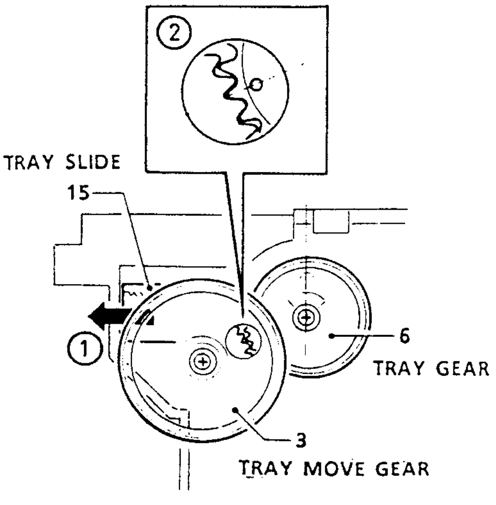
▨ FLOIL (G-474B)

(2) INSTALL THE TRAY GEAR

1) Near the Tray slide (15) in the direction of the arrow.(①)

2) Match the inner gear center of Tray gear (6).

3) Install the Tray move gear (3) with match the outer gear make(○) of Tray gear (6) as figure below.

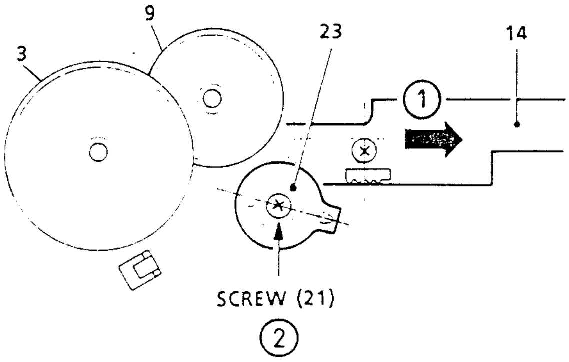

②
TRAY SLIDE
15
①
6
TRAY GEAR
3
TRAY MOVE GEAR

(3) INSTALL THE BASE-UP/DOWN SLIDE AND TIMING GEAR

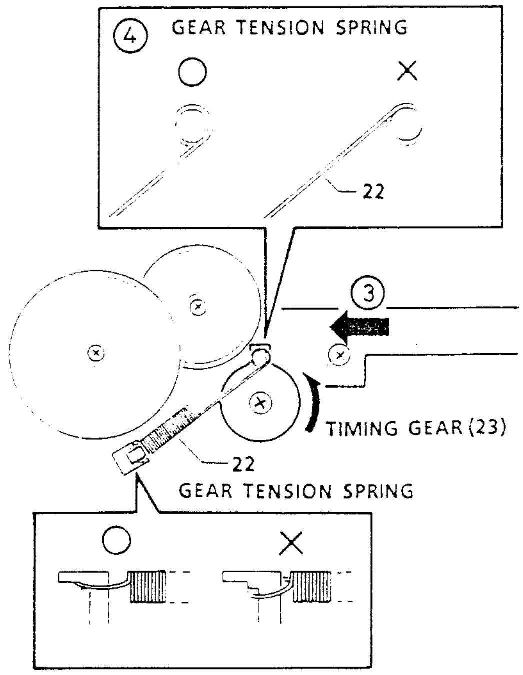
1) When near the Base up/down slide (14) in the direction of the arrow(①), set up the four gear(23) as follow figure position.

2) Insert the timing gear and stop by the screw (21).(②)

3) Turn the timing gear (23) to left direction.

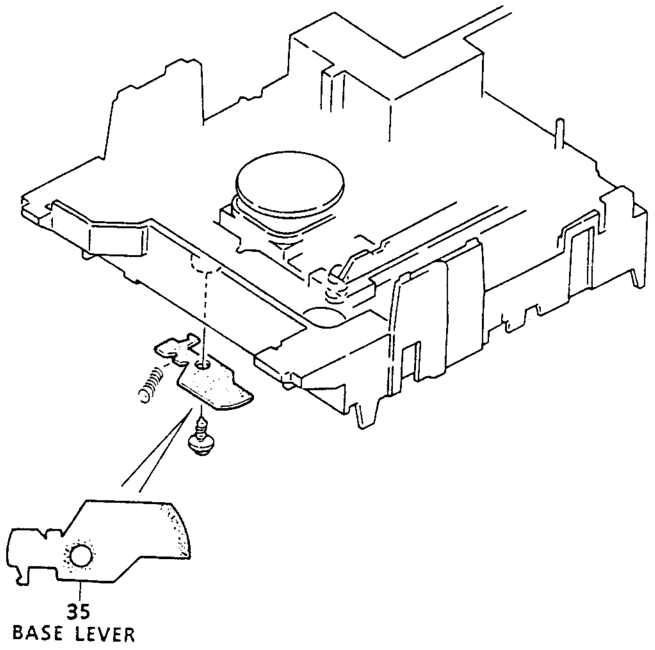

9
3
23
14
①
SCREW (21)
②

4) Hook the gear tension spring (22) to timing gear (23).


④
GEAR TENSION SPRING
○
×
22
③
TIMING GEAR (23)
22
GEAR TENSION SPRING
○
×

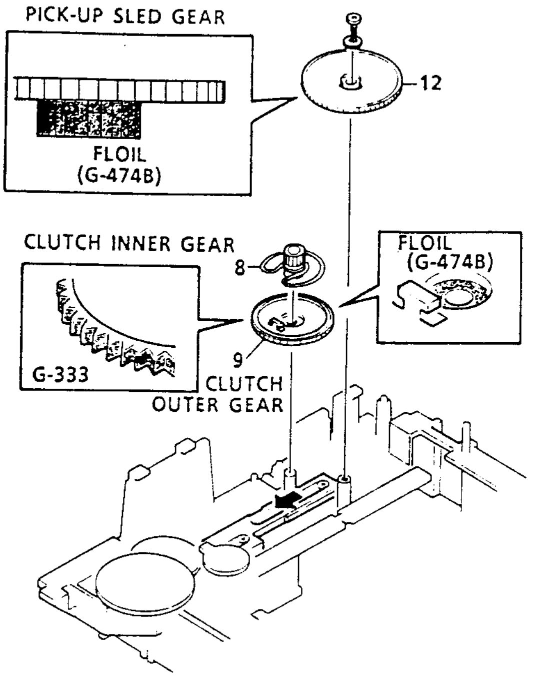
CD MECHANISM REMOVAL

(4) APPLY A GREASE OF BASE LEVER (35)
Apply a coating of FLOIL (G-474B)


35
BASE LEVER

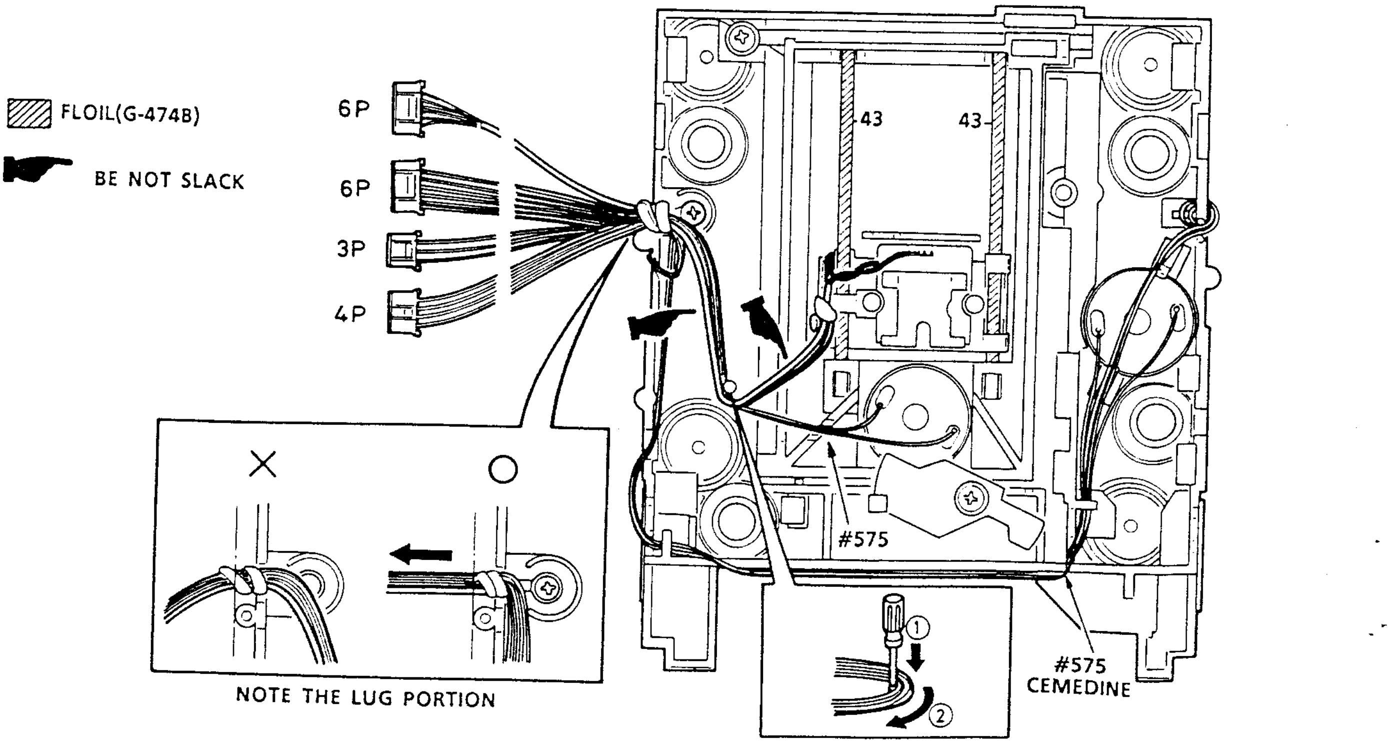
(5) APPLY A GREASE

1) Apply a coating of FLOIL (G-474B) to their entire circumference to Pick-up sled gear (12).
2) Apply a grease (G-333) to outside of clutch outer gear (9).
3) Apply a FLOIL (G-474B) to figure parts of clutch outer gear.


PICK-UP SLED GEAR
FLOIL
(G-474B)
12
CLUTCH INNER GEAR
8
FLOIL
(G-474B)
G-333
9
CLUTCH
OUTER GEAR

(6) LEAD RETAINER AND APPLY A CEMEDINE

1) Set up a pick-up to inner side and pass through on the pin (a), still more lead retainer not to touch at motors outside (b) and fixed the lug. Finally, confirm the pick-up moves smoothly from inner to outer circumference.
2) Apply a cemedine #575 for fix the lead retainer and fixed it.
3) Confirm the FLOIL (G-474B) to apply the pick-up rail(43).


▨ FLOIL(G-474B)
BE NOT SLACK
6P
6P
3P
4P
43
43
#575
#575
CEMEDINE
×
○
NOTE THE LUG PORTION
①
②

CD ADJUSTMENT

- Measurement instruments
  ① Test Disc : YEDS18(SONY)
  ② Oscilloscope : 10MHz class or Storage scope
  Oscilloscope : 10MHz class or DC voltage mater
  ③ Frequency Counter
  ④ Adjustment Driver (Non metallic) : for SVR11

In the adjustment, use the relay cord : 614 229 7094
For connection PCB :
CD MAIN PCB(CN142) and SERVO D/A PCB(CN105)

ITEM	CONNECTION	PARTS	REMARKS
Ⓐ PLL VCO Free Run	Frequency Counter (PLCK·GND)	T102	4.30 ± 0.01 MHz
Ⓑ Tracking Balance	Oscilloscope (TE· GND)	SVR11	Symmetrical Waveform

1. INITIAL

① Perform initial setting for SVR11 as shown in fig.4.

2. FREERUN FREQUENCY ADJUSTMENT FOR PLL-VCO.

① Connect the frequency counter to TP37(H),TP104(E).
② Turn on the power of the unit.
③ Adjust T102 so that the frequency counter reads 4.30±0.01MHz.

- If this adjustment is no good, get the long seek time, not read TOC, not sound in the worst case become high speed tuning reverse and it may wound the disc.

3. TRACKING BALANCE

① Connect the oscilloscope to TP103(TE),TP104(E).
② Turn on the power of the unit.
③ Insert Test Disc and press the Play button.
④ Continuously press the forward(or reverse) search button.
⑤ Adjust SVR11 so that the waveform of TP103(TE) is vertically symmetrical relative to DC 0V level. (Refer to fig,1.

- If this adjustment is imperfect, become run away the sled motor (pick sending motor), inferior playability.

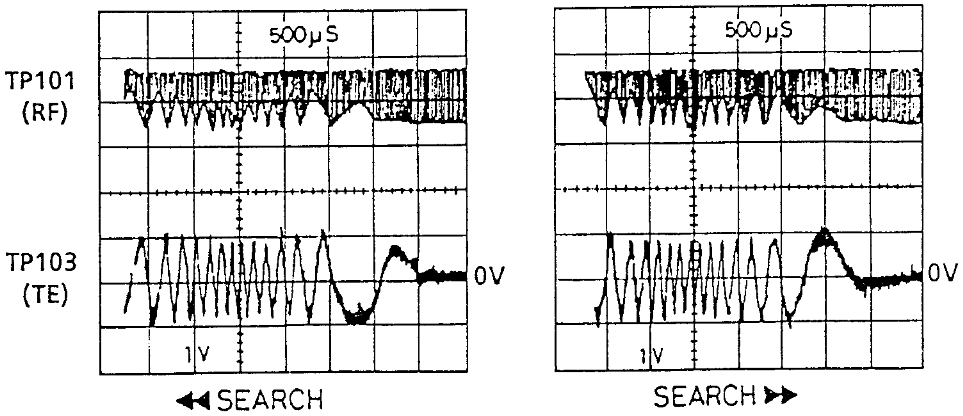


Fig.1

Eye Pattern (Refer Figure)

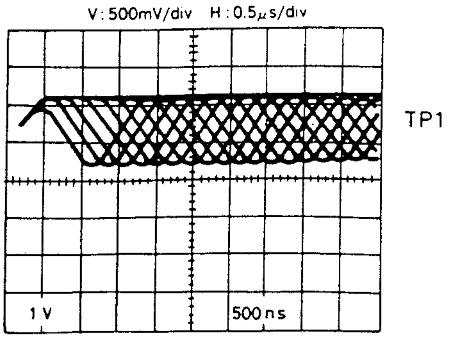


Fig.2

CD ADJUSTMENT

4. PARTS LOCATION

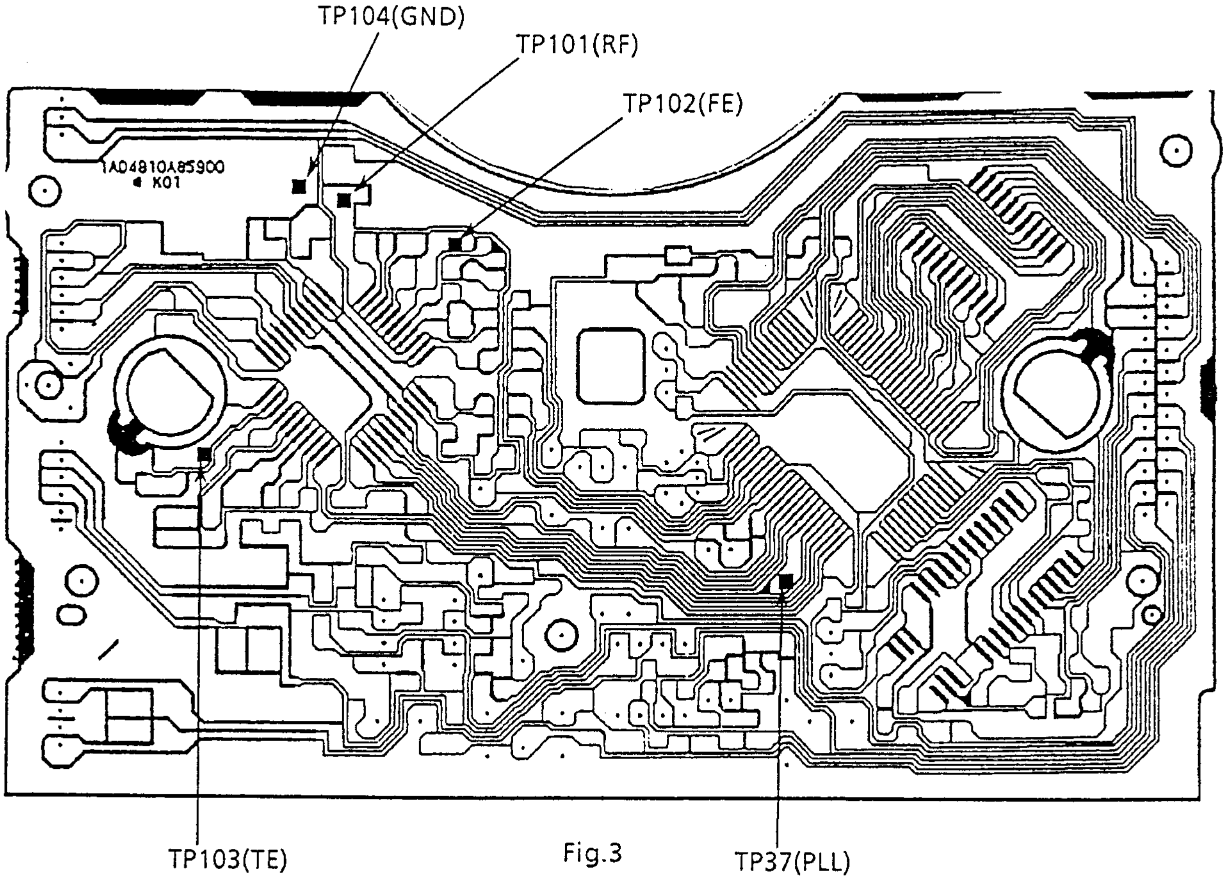

TP104(GND)
TP101(RF)
TP102(FE)
1AD4B10A85900
K01
TP103(TE)
TP37(PLL)

Fig.3

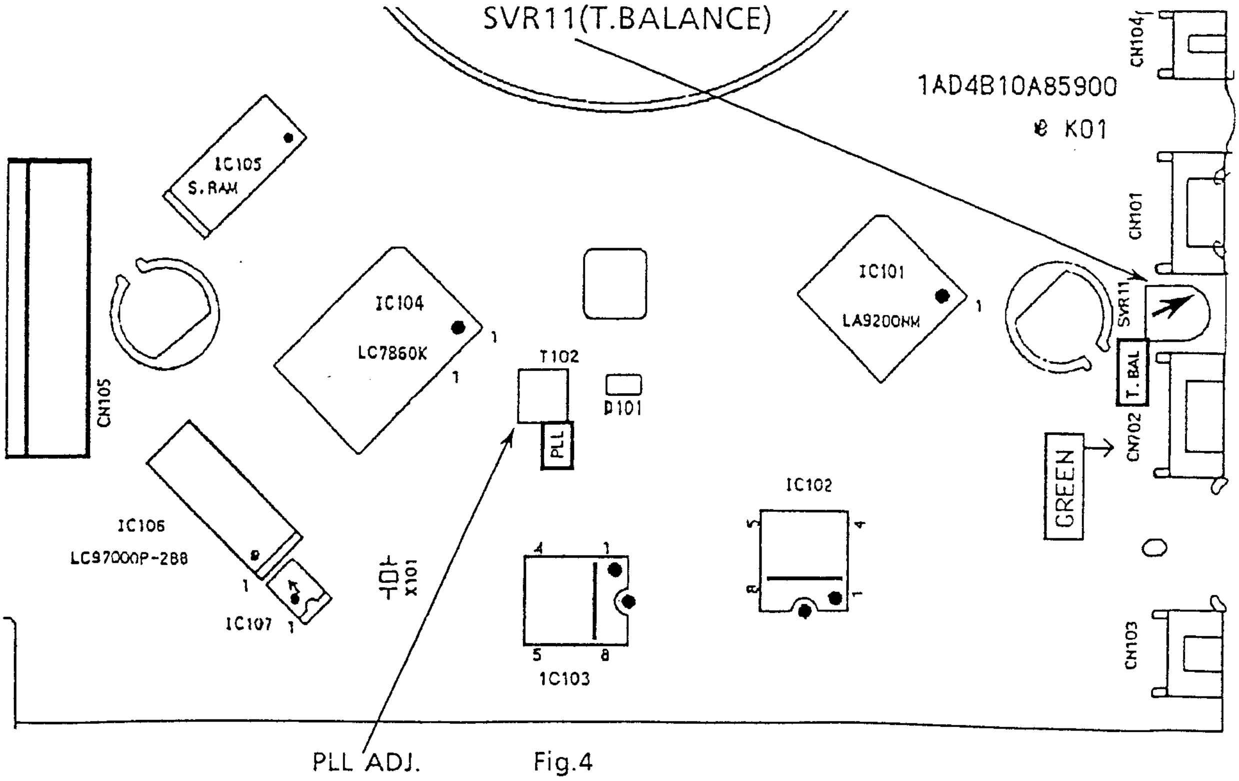
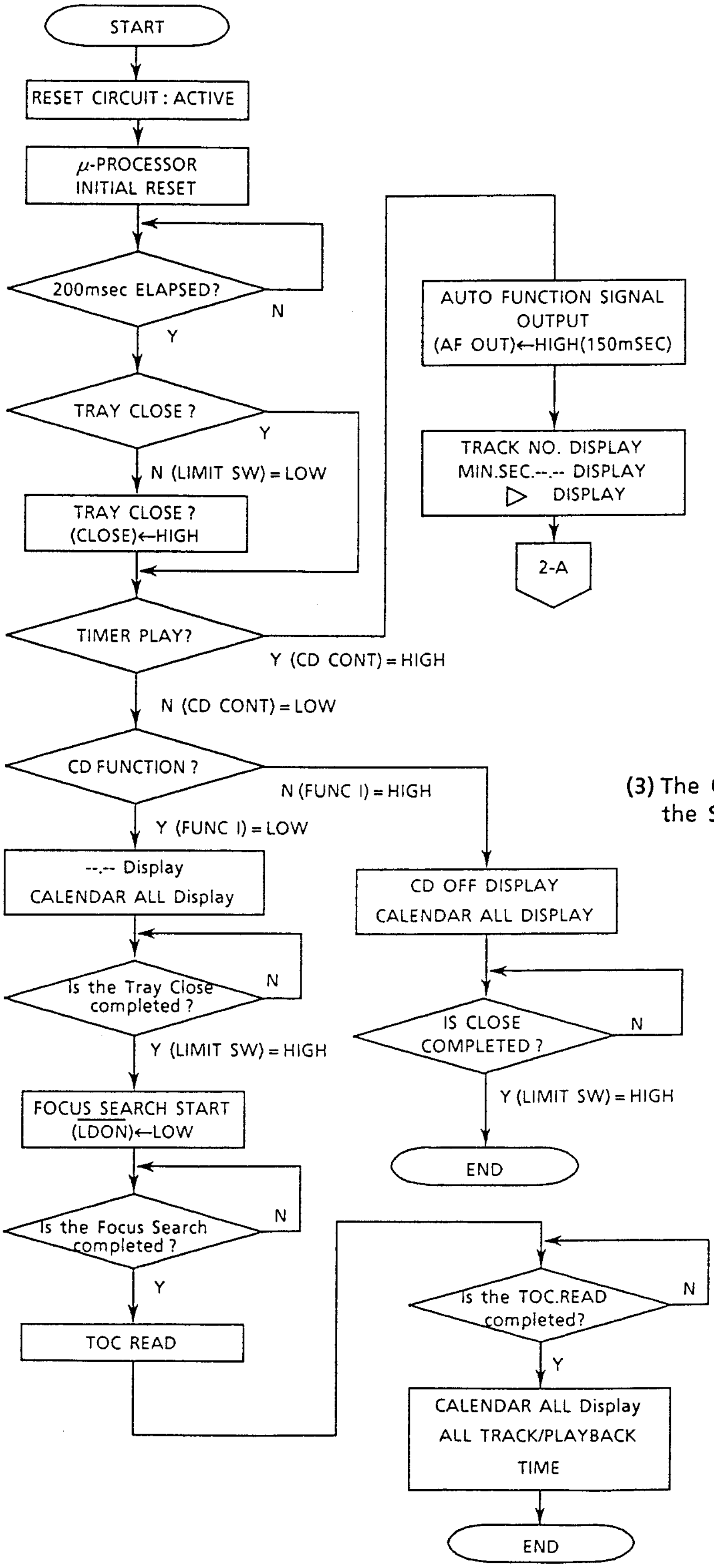

SVR11(T.BALANCE)
CN104
1AD4B10A85900
K01
IC105
S.RAM
CN101
IC104
LC7860K
1
1
IC101
LA9200NM
1
SVR11
T.BAL
CN702
GREEN
CN105
T102
D101
PLL
IC102
5
4
8
1
IC106
LC97000P-288
1
IC107
1
X101
4
1
5
8
IC103
CN103
PLL ADJ.

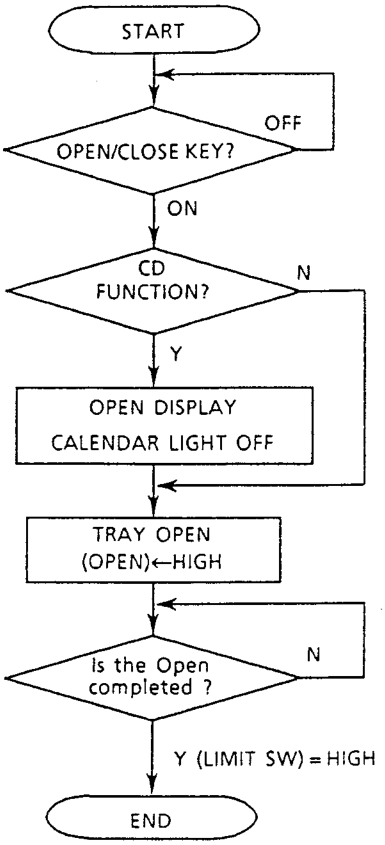
Fig.4

FLOW CHART (CD)

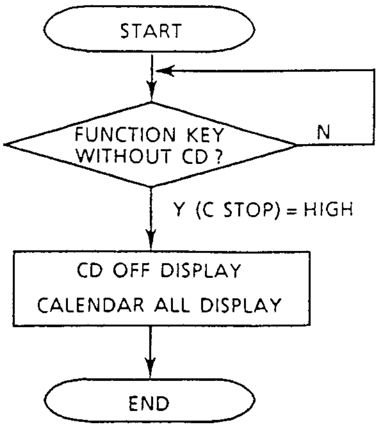
(1) Power On Mode


START
RESET CIRCUIT : ACTIVE
μ-PROCESSOR INITIAL RESET
200msec ELAPSED?
N
Y
TRAY CLOSE ?
Y
N (LIMIT SW) = LOW
TRAY CLOSE ? (CLOSE)←HIGH
TIMER PLAY?
Y (CD CONT) = HIGH
AUTO FUNCTION SIGNAL OUTPUT (AF OUT)←HIGH(150mSEC)
TRACK NO. DISPLAY MIN.SEC.--.-- DISPLAY ▷ DISPLAY
2-A
N (CD CONT) = LOW
CD FUNCTION ?
N (FUNC I) = HIGH
Y (FUNC I) = LOW
--.-- Display CALENDAR ALL Display
CD OFF DISPLAY CALENDAR ALL DISPLAY
Is the Tray Close completed ?
N
Y (LIMIT SW) = HIGH
IS CLOSE COMPLETED ?
N
Y (LIMIT SW) = HIGH
END
FOCUS SEARCH START (LDON)←LOW
Is the Focus Search completed ?
N
Y
TOC READ
Is the TOC.READ completed?
N
Y
CALENDAR ALL Display ALL TRACK/PLAYBACK TIME
END

(2) The Tray open from the Stop mode

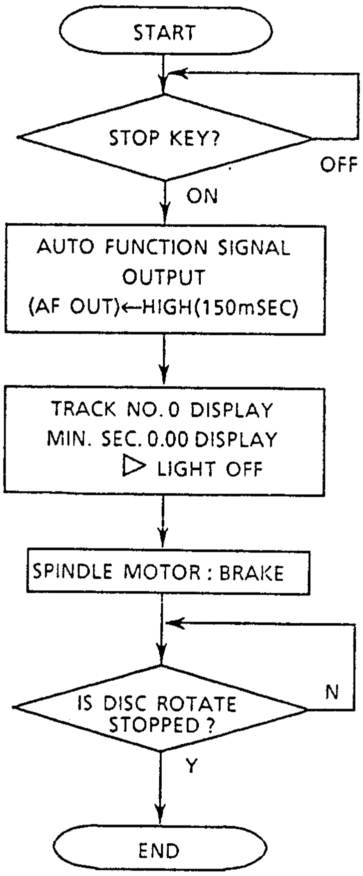

START
OPEN/CLOSE KEY?
OFF
ON
CD FUNCTION?
N
Y
OPEN DISPLAY CALENDAR LIGHT OFF
TRAY OPEN (OPEN)←HIGH
Is the Open completed ?
N
Y (LIMIT SW) = HIGH
END

(3) The Other Function from the Stop mode

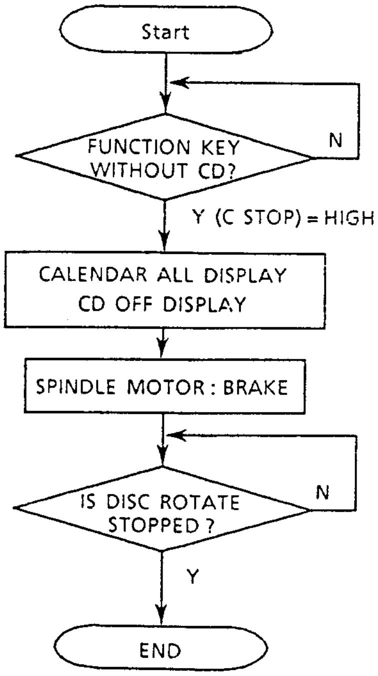

START
FUNCTION KEY WITHOUT CD ?
N
Y (C STOP) = HIGH
CD OFF DISPLAY CALENDAR ALL DISPLAY
END

FLOW CHART (CD)

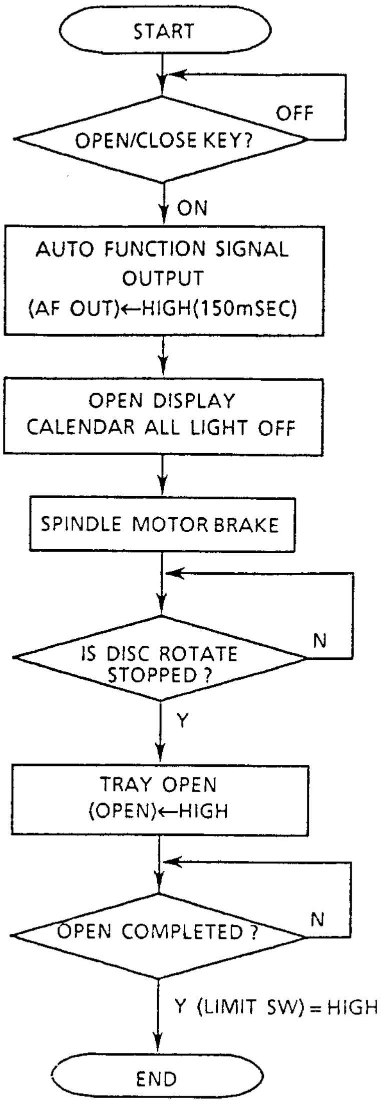
(4) To the Stop mode from the Play-Back


START
STOP KEY?
OFF
ON
AUTO FUNCTION SIGNAL OUTPUT (AF OUT)←HIGH(150mSEC)
TRACK NO. 0 DISPLAY
MIN. SEC. 0.00 DISPLAY
▷ LIGHT OFF
SPINDLE MOTOR : BRAKE
IS DISC ROTATE STOPPED ?
N
Y
END

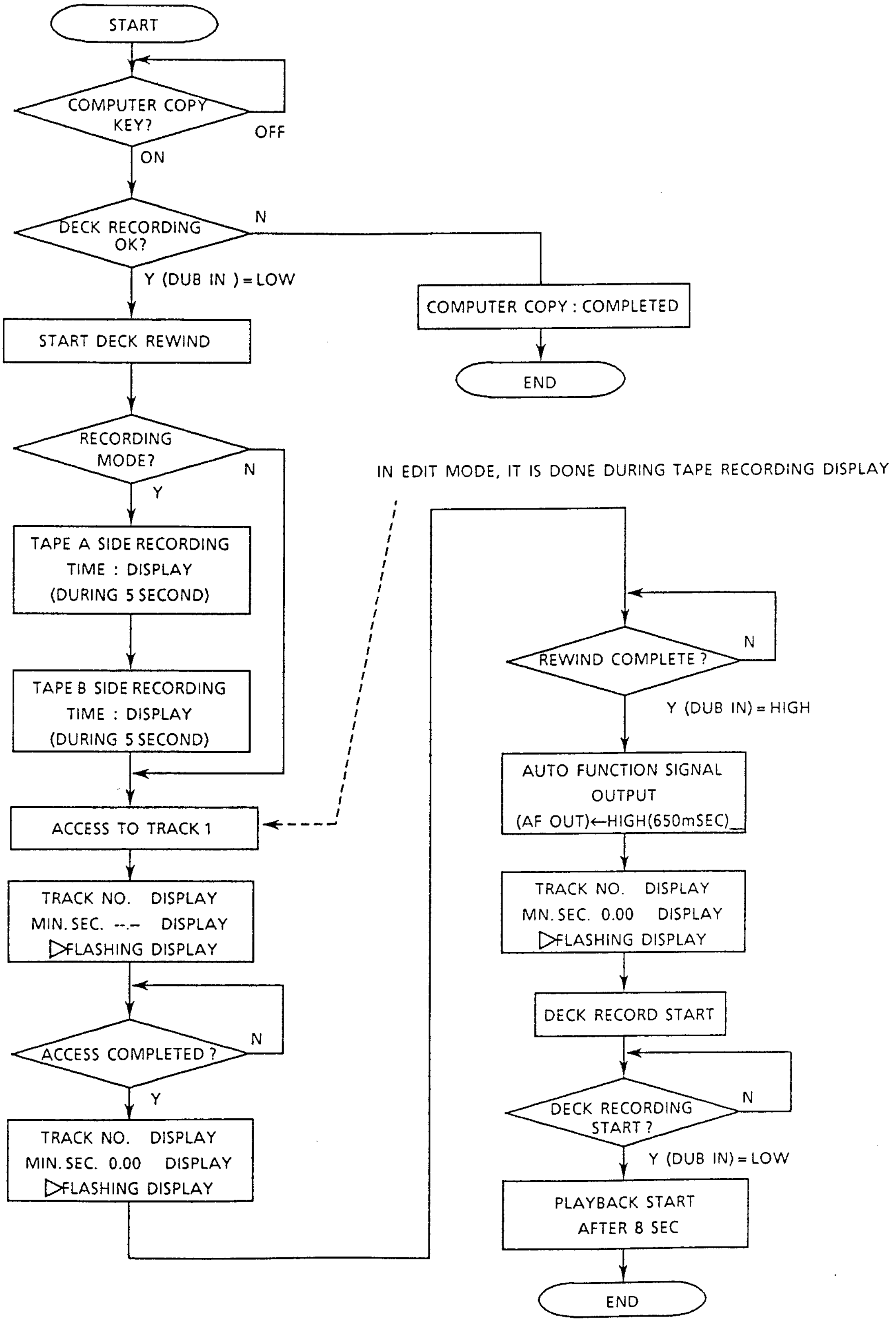
(5) To the Other mode from the Play-Back


Start
FUNCTION KEY WITHOUT CD?
N
Y (C STOP) = HIGH
CALENDAR ALL DISPLAY
CD OFF DISPLAY
SPINDLE MOTOR : BRAKE
IS DISC ROTATE STOPPED ?
N
Y
END

(6) To the Open mode from the Play-Back


START
OPEN/CLOSE KEY?
OFF
ON
AUTO FUNCTION SIGNAL OUTPUT (AF OUT)←HIGH(150mSEC)
OPEN DISPLAY
CALENDAR ALL LIGHT OFF
SPINDLE MOTOR BRAKE
IS DISC ROTATE STOPPED ?
N
Y
TRAY OPEN
(OPEN)←HIGH
OPEN COMPLETED ?
N
Y (LIMIT SW) = HIGH
END

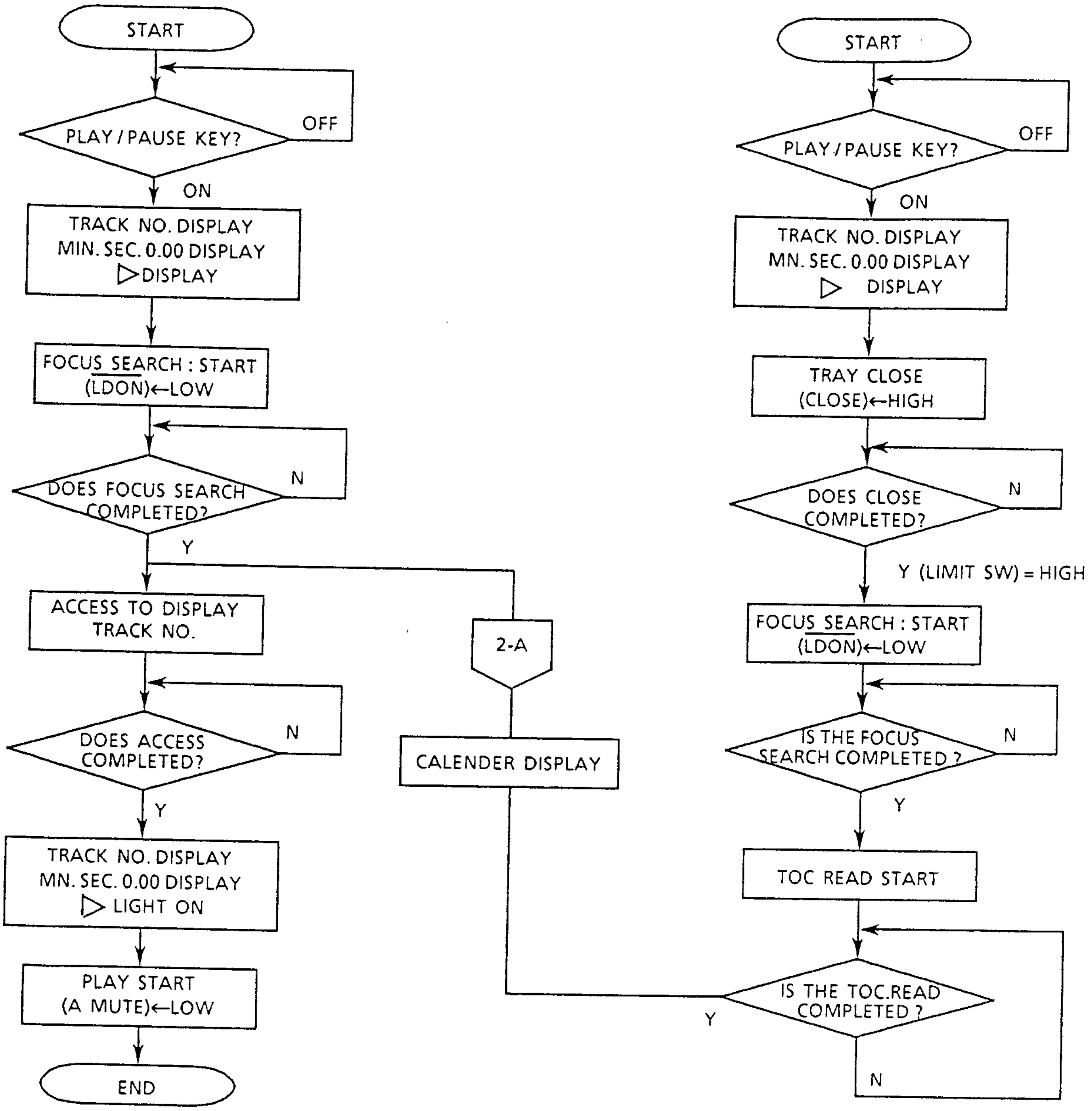
(7) Computer copy


START
COMPUTER COPY KEY?
OFF
ON
DECK RECORDING OK?
N
Y (DUB IN) = LOW
COMPUTER COPY : COMPLETED
END
START DECK REWIND
RECORDING MODE?
N
Y
IN EDIT MODE, IT IS DONE DURING TAPE RECORDING DISPLAY
TAPE A SIDE RECORDING TIME : DISPLAY (DURING 5 SECOND)
TAPE B SIDE RECORDING TIME : DISPLAY (DURING 5 SECOND)
ACCESS TO TRACK 1
TRACK NO. DISPLAY
MIN. SEC. --.-- DISPLAY
▷FLASHING DISPLAY
ACCESS COMPLETED ?
N
Y
TRACK NO. DISPLAY
MIN. SEC. 0.00 DISPLAY
▷FLASHING DISPLAY
REWIND COMPLETE ?
N
Y (DUB IN) = HIGH
AUTO FUNCTION SIGNAL OUTPUT
(AF OUT)←HIGH(650mSEC)
TRACK NO. DISPLAY
MN. SEC. 0.00 DISPLAY
▷FLASHING DISPLAY
DECK RECORD START
DECK RECORDING START ?
N
Y (DUB IN) = LOW
PLAYBACK START AFTER 8 SEC
END

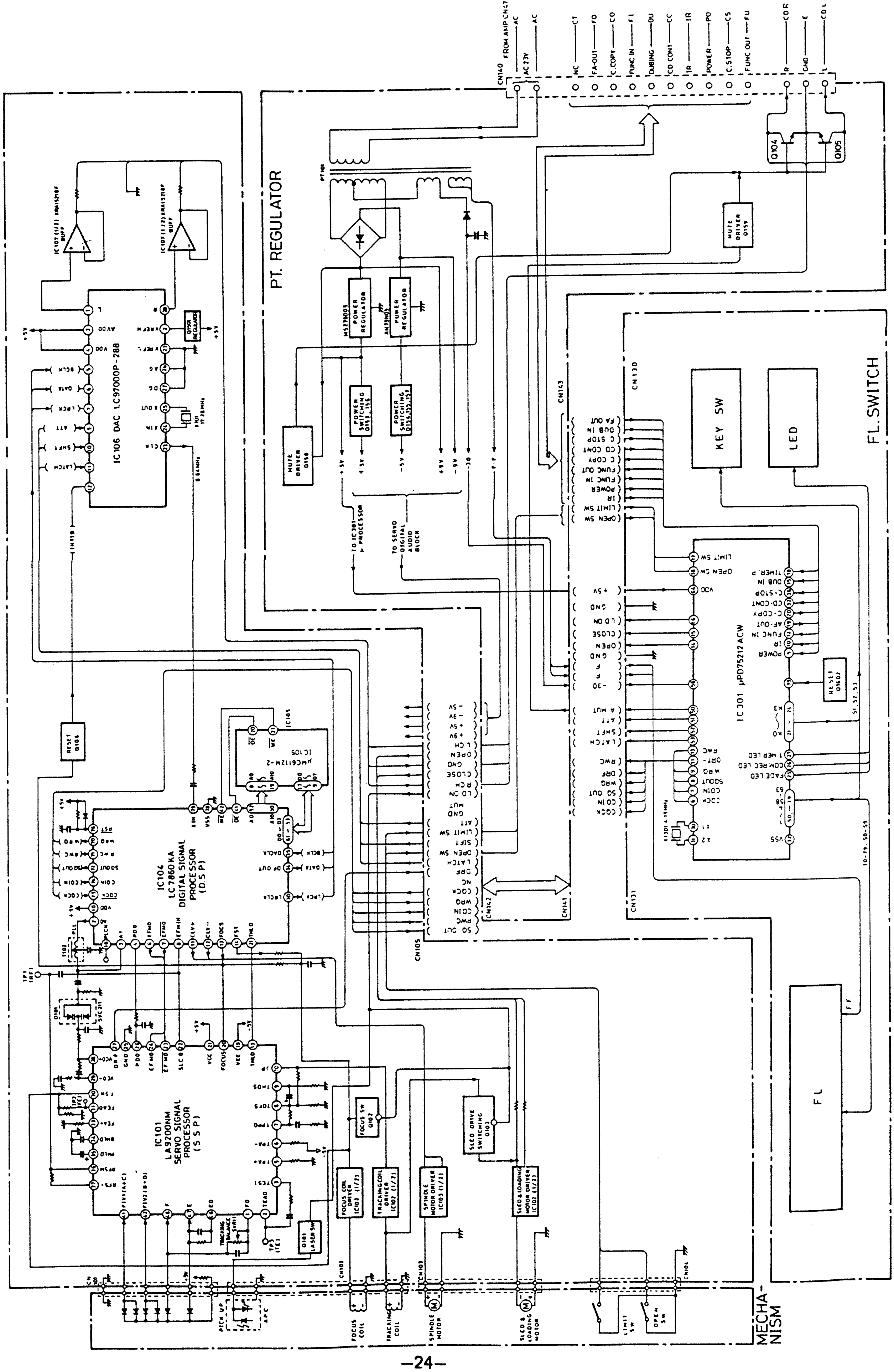
FLOW CHART (CD)

(8) To the Play-Back from the STOP

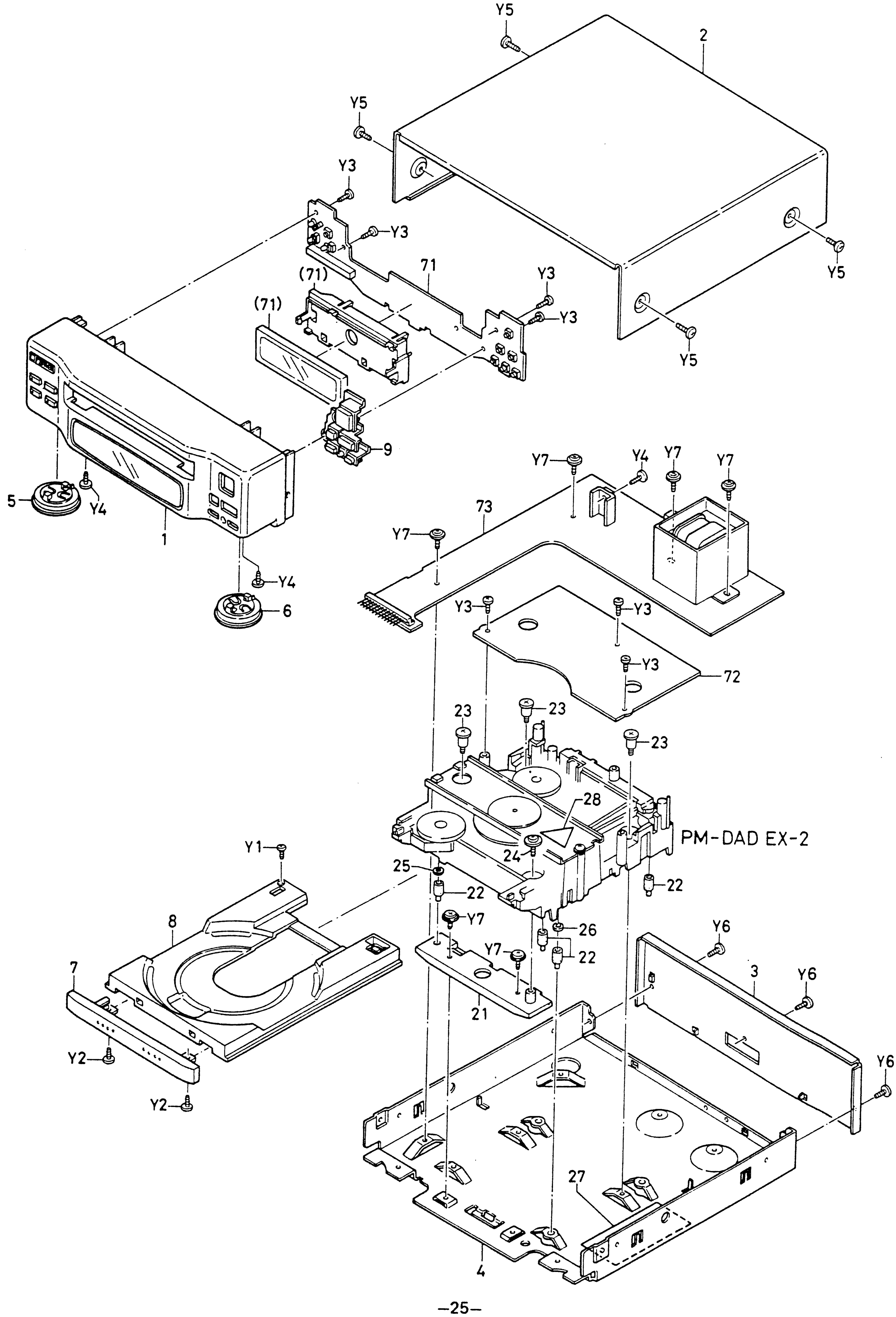
(9) To the Play-Back from the Tray-open


START
PLAY/PAUSE KEY?
OFF
ON
TRACK NO. DISPLAY
MIN. SEC. 0.00 DISPLAY
▷DISPLAY
FOCUS SEARCH : START
(LDON)←LOW
DOES FOCUS SEARCH COMPLETED?
N
Y
ACCESS TO DISPLAY TRACK NO.
DOES ACCESS COMPLETED?
N
Y
TRACK NO. DISPLAY
MN. SEC. 0.00 DISPLAY
▷ LIGHT ON
PLAY START
(A MUTE)←LOW
END
2-A
CALENDER DISPLAY
START
PLAY/PAUSE KEY?
OFF
ON
TRACK NO. DISPLAY
MN. SEC. 0.00 DISPLAY
▷ DISPLAY
TRAY CLOSE
(CLOSE)←HIGH
DOES CLOSE COMPLETED?
N
Y (LIMIT SW) = HIGH
FOCUS SEARCH : START
(LDON)←LOW
IS THE FOCUS SEARCH COMPLETED ?
N
Y
TOC READ START
IS THE TOC.READ COMPLETED ?
Y
N

BLOCK DIAGRAM (CD)


MECHA SERVO
PT. REGULATOR
FL. SWITCH
MECHA-NISM
CN140 FROM AMP CN47
AC 23V
NC
FA-OUT
C.COPY
FUNC IN
DUBING
CD CONT
IR
POWER
C.STOP
FUNC OUT
R
GND
L
Q104
Q105
PT101
MUTE DRIVER Q159
MUTE DRIVER Q158
M5279005 POWER REGULATOR
AN7809S POWER REGULATOR
POWER SWITCHING Q153,156
POWER SWITCHING Q154,155,157
TO IC301 μ PROCESSOR
TO SERVO DIGITAL AUDIO BLOCK
IC107 (1/2) BUFF
IC107 (2/2) BUFF
IC106 DAC LC97000P-288
RESET Q106
IC104 LC7860KA DIGITAL SIGNAL PROCESSOR (DSP)
IC105 μMC6112M-2
IC101 LA9200NM SERVO SIGNAL PROCESSOR (SSP)
FOCUS SW Q102
SLED DRIVE SWITCHING Q103
FOCUS COIL DRIVER IC102 (1/2)
TRACKING COIL DRIVER IC102 (1/2)
SPINDLE MOTOR DRIVER IC103 (1/2)
SLED & LOADING MOTOR DRIVER IC102 (1/2)
Q101 LASER SW
CN105
CN141
CN142
CN143
CN130
CN131
CN101
CN102
CN103
CN104
IC301 μPD75212ACW
RESET Q160
KEY SW
LED
FL
PICK UP
APC
FOCUS COIL
TRACKING COIL
SPINDLE MOTOR
SLED & LOADING MOTOR
LIMIT SW
OPEN SW

EXPLODED VIEW (CD)



Y5
2
Y5
Y3
Y3
71
(71)
(71)
Y3
Y3
Y5
Y5
9
5
Y4
1
Y4
6
Y7
Y4
Y7
Y7
73
Y7
Y3
Y3
Y3
72
23
23
23
23
28
PM-DAD EX-2
Y1
25
24
22
22
8
Y7
26
Y7
22
Y6
7
21
3
Y6
Y2
Y6
Y2
27
4

PARTS LIST (CD)

CABINET & CHASSIS (AD-G5)

REF.NO.	PART NO.	DESCRIPTION
1	614 236 2044	ASSY,PANEL,FRONT(B)
	614 236 2037	ASSY,PANEL,FRONT(W)
2	614 227 0974	ASSY,CABINET(B)
	614 236 1986	ASSY,CABINET(W)
3	614 236 2167	PANEL,REAR
4	614 227 5641	ASSY,CABINET,BOTTOM
5	614 234 7218	ASSY,FOOT,FRONT-L
6	614 234 7225	ASSY,FOOT,FRONT-R
7	614 236 2136	ESCUTCHEON,CD DOOR(B)
	614 236 2129	ESCUTCHEON,CD DOOR(W)
8	614 224 2124	TABLE,LOADING,CD TRAY
9	614 236 2211	BUTTON,PLAY/PAUSE(W)
	614 227 1643	BUTTON,PLAY/PAUSE(B)
21	614 227 5740	MOUNT-M,CD MECHA
22	614 195 6978	RUBBER CUSHION,MECHA FLOAT
23	412 004 5705	SPECIAL SCREW,MECHA FIX(3 USED)
24	412 003 1708	SPECIAL SCREW,MECHA FIX(1 USED)
25	412 012 8002	SPECIAL WASHER,CD MECHA(LEFT)
26	412 012 7906	SPECIAL WASHER,CD MECHA(RIGHT)
27	614 232 0464	LABEL,SEFETY,CAUTION,LASER BEAM
28	614 191 3698	LABEL,CAUTION,LASER BEAM

FIXING PARTS (AD-G5)

REF.NO.	PART NO.	DESCRIPTION
Y1	411 022 8408	SCR S-TPG PAN 2X8
Y2	411 021 1202	SCR S-TPG BIN 2X8
Y3	411 021 1806	SCR S-TPG BIN 2.6X10
Y4	411 021 6405	SCR S-TPG BIN 3X8
Y5	411 021 6603	SCR S-TPG BIN 3X8(B)
	411 098 4205	SCR S-TPG BIN 3X8(W)
Y6	411 021 3503	SCR S-TPG BIN 3X10
Y7	411 020 9902	SCR S-TPG BRZ+FLG 3X8

CD FRONT P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 228 4391	ASSY,PCB,FL,MICON
	614 227 1865	MOUNT-E,FL
CN130	614 017 2621	PLUG,11P,TO MAIN PCB
CN131	614 226 2542	SOCKET,20P(B TO B),TO MAIN PCB
D168	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D169	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D171	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D173	407 053 8807	ZENER DIODE MTZ9.1B
D174	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D175	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D176	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D177	407 127 5107	LED SLP-881C-51-B,T.EDIT
OR	407 132 5901	LED SLP-881C-51-C,T.EDIT
D178	407 127 5107	LED SLP-881C-51-B,C.REC
OR	407 132 5901	LED SLP-881C-51-C,C.REC
D179	407 127 5107	LED SLP-881C-51-B,F.EDIT
OR	407 132 5901	LED SLP-881C-51-C,F.EDIT
FL101	614 226 7950	FLUORESCENT TUBE,FOR CD
IC301	410 112 3309	IC UPD75212ACW-256
Q162	405 000 4407	TR DTC124ES
OR	405 018 2600	TR 2SC3400
S1001	614 219 0876	SWITCH,TACT,TIME EDIT
S1002	614 219 0876	SWITCH,TACT,FADE EDIT
S1003	614 220 5631	SWITCH,TACT,EDIT
S1004	614 219 0876	SWITCH,TACT,C.REC
S1005	614 220 5631	SWITCH,TACT,OPEN/CLOSE
S1006	614 220 5631	SWITCH,TACT,PLAY/PAUSE
S1007	614 220 5631	SWITCH,TACT,STOP/CLEAR
S1008	614 220 5631	SWITCH,TACT,MEMORY
S1009	614 220 5631	SWITCH,TACT,FWD
S1010	614 220 5631	SWITCH,TACT,BACK
X1301	614 215 5608	RESONATOR,4.19MHZ

SERVO·SIGNAL PROCESSOR P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 231 9697	ASSY,PCB,SERVO DA
CN101	614 017 3857	PLUG,6P,PICK SENSOR
CN102	614 017 3857	PLUG,6P,PICK COIL
CN103	614 017 3833	PLUG,4P,MECHA MOTOR
CN104	614 017 3826	PLUG,3P,MECHA SW
CN105	614 227 8017	SOCKET,24P,TO MAIN PCB
D101	407 105 0100	VARACTOR DI SVC211-B-AL
D102	407 003 3609	DIODE DAN202K
IC101	409 124 6507	IC LA9200NM,SSP
IC102	409 139 4901	IC LA6517
IC103	409 139 4901	IC LA6517
IC104	409 200 0702	IC LC7860KA,DSP
IC105	409 228 0500	IC UM6116M-2
IC106	409 206 9006	IC LC97000P-288,DAC
IC107	409 241 5506	IC XRA15218F
Q101	405 096 9607	TR DTA113ZK
Q102	405 000 4100	TR DTC124EK
Q103	405 000 4100	TR DTC124EK
Q106	405 000 4100	TR DTC124EK
Q107	405 014 4509	TR 2SC2412K-R
R1901	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R1902	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R1903	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R1904	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R1905	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R1906	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R1951	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1952	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1953	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1954	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1955	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1956	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1957	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1958	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1959	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1960	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1961	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1962	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R1963	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
SVR11	614 203 6655	SEMI-FIXED V.R,100K OHM(B),T.BAL
T102	614 226 7936	TRANS,OSC,PLL
TP101	614 227 6839	TERMINAL,CHECKER CHIP,RF
TP102	614 227 6839	TERMINAL,CHECKER CHIP,FE
TP103	614 227 6839	TERMINAL,CHECKER CHIP,TE
TP104	614 227 6839	TERMINAL,CHECKER CHIP,GED
TP105	614 227 6839	TERMINAL,CHECKER CHIP,PLL
X101	614 228 9426	RESONATOR,17.28MHZ

PARTS LIST (CD)

CD MAIN P.C.BOARD ASSY

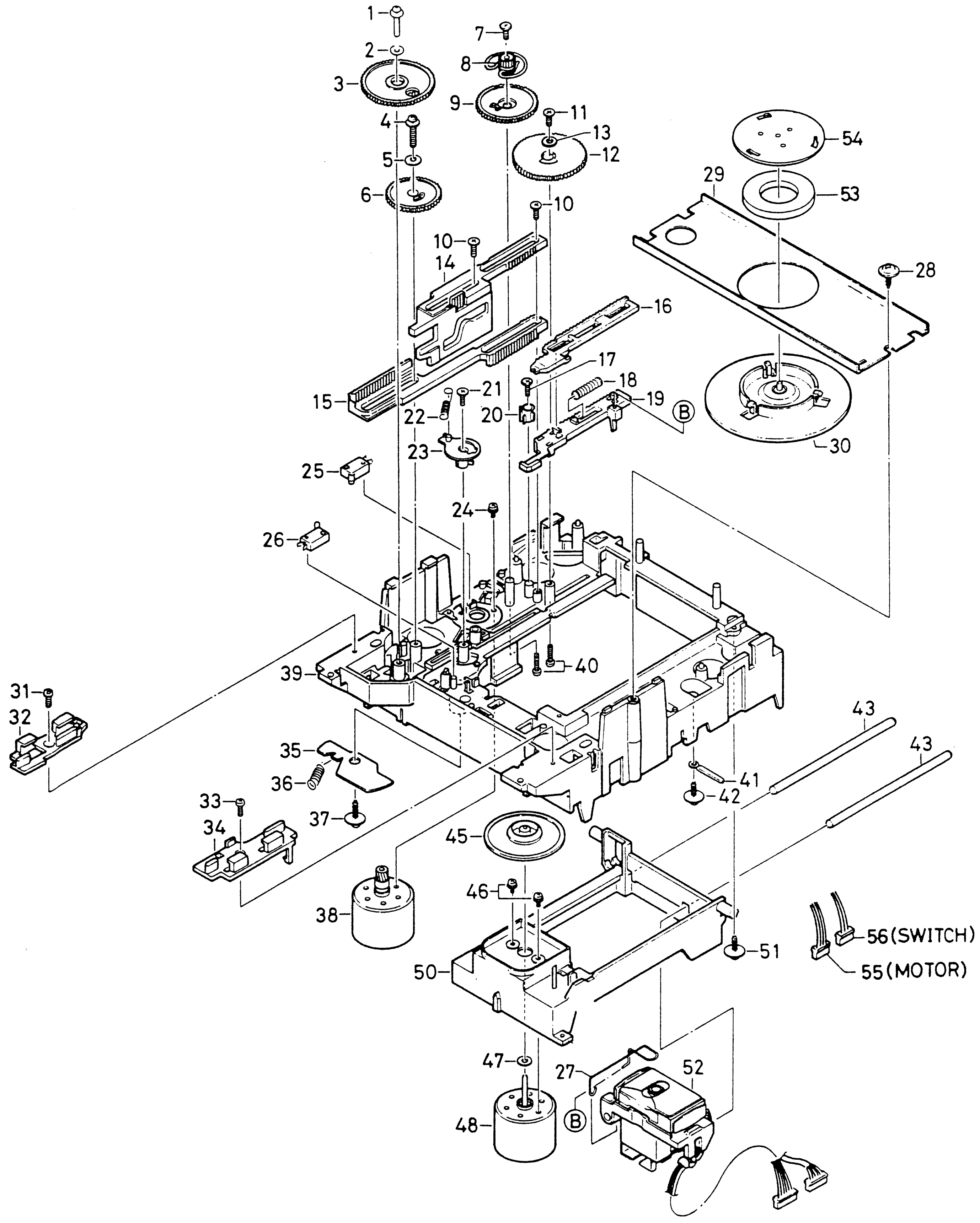
REF.NO.	PART NO.	DESCRIPTION
73	614 231 9703	ASSY,PCB,SYSTEM
	614 121 6829	HEAT SINK,FOR IC151
OR	614 121 5891	HEAT SINK,FOR IC151
C1606	403 043 3104	ELECT 2200U M 16V
C1607	403 043 3104	ELECT 2200U M 16V
CN140	614 227 2985	SOCKET,15P,TO AMP.UNIT
CN141	614 225 3564	PLUG,20P,TO SERVO·S.P PCB
CN142	614 227 7782	SOCKET,24P,TO SERVO·S.P PCB
CN143	614 017 2621	PLUG,11P,TO FRONT PCB
CN170	614 226 8735	CORD,24P,CN105-CN142
CN171	614 227 8642	ASSY,CONNECTOR-S,11P,CN143-CN130
D151	407 050 2204	ZENER DIODE GZA30Y
D153	407 050 5502	ZENER DIODE GZA5.6Y
D154	407 004 9105	DIODE DSF10C
OR	407 012 3300	DIODE 1SR35-200A
D155	⚠407 005 2006	DIODE DS135D-KB1
OR	⚠408 007 9307	DIODE 1SR35-200A-HP
D156	⚠407 005 2006	DIODE DS135D-KB1
OR	⚠408 007 9307	DIODE 1SR35-200A-HP
D157	⚠407 005 2006	DIODE DS135D-KB1
OR	⚠408 007 9307	DIODE 1SR35-200A-HP
D158	⚠407 005 2006	DIODE DS135D-KB1
OR	⚠408 007 9307	DIODE 1SR35-200A-HP
D159	407 050 4802	ZENER DIODE GZA5.1Y
D161	407 005 4505	DIODE DS442X
D162	407 005 4505	DIODE DS442X
IC151	⚠409 189 4203	IC M5278D05
IC152	⚠409 224 2102	IC AN79N05
PT101	⚠614 232 0013	POWER TRANS
Q104	405 033 6805	TR 2SD1468S-S
Q105	405 033 6805	TR 2SD1468S-S
Q153	405 000 3400	TR DTC114TS
OR	405 035 1600	TR RN1211
Q154	405 000 3400	TR DTC114TS
OR	405 035 1600	TR RN1211
Q155	405 002 1305	TR 2SA1048-Y
OR	405 006 1806	TR 2SA933S-R
OR	405 006 1905	TR 2SA933S-S
Q156	⚠405 099 1004	TR 2SD592-S
OR	⚠405 099 7501	TR 2SD592-R
Q157	⚠405 099 0908	TR 2SB621-S
OR	⚠405 099 7303	TR 2SB621-R
Q158	405 082 4609	TR DTA123YS
Q159	405 082 4609	TR DTA123YS
R1651	402 046 9304	RESISTOR 270 J- 1/2W

PARTS LIST (CD MECHANISM)

CD MECHANISM (PM-DAD EX2)

REF.NO.	PART NO.	DESCRIPTION
1	411 119 8908	SCR S-TPG PAN 2X14,GEAR 3 FIX
2	411 087 4704	WASHER V 2X6X0.4,GEAR FIX
3	614 224 2056	GEAR,TRAY MOVE
4	411 119 8908	SCR S-TPG PAN 2X4,GEAR 6 FIX
5	411 087 4704	WASHER V 2X6X0.4,GEAR FIX
6	614 224 2049	GEAR,TARY
7	412 031 2104	SPECIAL SCREW,GEAR 8 FIX
8	614 229 6066	ASSY,GEAR,CLUTCH.INNER, FOR SERVICE
9	614 224 1974	GEAR,CLUTCH OUTER
10	412 031 2104	SPECIAL SCREW,SLIDE 14 FIX
11	412 031 2104	SPECIAL SCREW,GEAR 12 FIX
12	614 224 1998	GEAR,PICK SLED
13	412 014 2800	SPECIAL WASHER,PICK GEAR FIX
14	614 233 6311	SLIDE,BASE UP/DOWN
15	614 224 2094	SLIDE,TRAY
16	614 224 2018	GEAR,PICK RACK UPPER
17	412 031 2104	SPECIAL SCREW,GEAR 20 FIX
18	614 225 0884	SPRING,COMP,RACK BACK
19	614 224 2001	GEAR,PICK RACK LOWER
20	614 224 2032	GEAR,BASE/TRAY TIMING
21	412 031 2104	SPECIAL SCREW,GEAR 23 FIX
22	614 225 0860	SPRING,TENS,GEAR 23 TENSION
23	614 229 1337	GEAR,TIMING
24	411 044 7205	SCR PAN+SW 2X4,SLED MOTOR FIX
25	614 018 9223	SWITCH,LIMIT
26	614 018 9223	SWITCH,TRAY OPEN
27	614 229 4529	SPRING,WIRE,PICK BACK
28	411 020 9803	SCR S-TPG BRZ+FLG 3X6,CHUCK BRACKET FIX
29	614 226 7318	BRACKET-M,CHUCK
30	614 228 5848	ASSY,PULLEY,CHUCK
31	411 022 7807	SCR S-TPG PAN 2X6,TRAY BRACKET FIX
32	614 224 3176	BRACKET-M,TRAY GUIDE(L)
33	411 022 7807	SCR S-TPG PAN 2X6,TRAY BRACKET FIX
34	614 224 3183	BRACKET-M,TRAY GUIDE(R)
35	614 233 6304	LEVER,BASE
36	614 226 5536	SPRING,COMP,BASE LEVER MOVE
37	411 020 9902	SCR S-TPG BRZ+FLG 3X8,BASE LEVER FIX
38	614 225 4820	ASSY,MOTOR,LOADING·SLED
39	614 228 5855	CHASSIS,LOADING
40	412 031 2104	SPECIAL SCREW,BOSS REINFORCEMENT
41	614 129 9136	LUG,PICK UP LEAD FIX
42	411 021 5705	SCR S-TPG BIN 3X6,PICK LEAD FIX
43	614 145 9622	SHAFT,PICK RAIL
OR	614 227 6204	SHAFT,PICK RAIL
OR	614 230 0411	SHAFT,PICK RAIL
45	614 216 9341	TURN TABLE
46	411 044 7205	SCR PAN+SW 2X4,SPINDLE MOTOR FIX
47	412 032 0208	SPECIAL WASHER,ADHESIVE ESCAPE STOP
48	614 224 1882	COMMUTATE MOTOR,SPINDLE
50	614 224 1950	CHASSIS,BASE
51	411 020 9803	SCR S-TPG BRZ+FLG 3X6,BASE CHASSIS FIX
52	614 218 6855	PICKUP,LASER,SF-90
53	614 226 6878	MAGNET,CHUCK
54	614 226 6885	PLATE,MAGNET FIX
55	614 229 1795	ASSY,CONNECTOR-S,4P W/LEAD, SPINDLE·SLED MOTOR
56	614 229 1801	ASSY,CONNECTOR-S,3P W/LEAD, LIMIT·TRAY OPEN SWITCH
	614 229 6431	SHEET

EXPLODED VIEW (CD MECHANISM)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53
54
55(MOTOR)
56(SWITCH)
B
B

IC VOLTAGE TABLE (CD)

IC 101 LA9200NM

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	*-0.3*	*fluc*	*0.2*	*0*											*0*	*3.8*	*0*	*4.0*	*-5.0*	*0*
STOP	*0*		*0.3*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4.8*	*4.3*	*4.1*	*4.1*	*4.0*	*-5.0*	*0*
Pin No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	*4.9*	*2.5*	*2.6*	*2.4*	*0*	*2.4*	*4.16*	*2.5*	*2.4*	*fluc*	*-0.3*	*0.3*	*0.3*	*0.8*	*2.9*	*1.7*		*0.3*	*-5.0*	*5.0*
STOP	*4.9*	*3.6*	*1.5*	*1.6*	*0*	*2.4*	*0*	*2.4*	*2.4*	*0*	*0.6*	*0.6*	*0.6*	*0.2*	*-0.2*	*-0.1*	*0*	*4.2*	*4.9*	*5.0*
Pin No.	41	42	43	44	45	46	47	48												
PLAY			*-5.0*																	
STOP	*0*	*0*	*-5.0*	*0*	*0*	*0*	*0*	*0*												

IC 102 · 103 LC6517

Pin No.	1	2	3	4	5	6	7	8
PLAY	*fluc*	*10*	*fluc*	*-10*	*fluc*	*fluc*	*fluc*	*fluc*

IC 104 LC7860KA

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY		*2.5*	*2.4*	*2.4*	*0*	*2.4*	*2.4*	*2.5*	*0*	*4.9*	*0.8*	*0*	*0*	*3.0*	*4.2*	*0*	*4.2*	*2.5*	*4.9*	
STOP		*2.5*	*2.4*	*2.4*	*0*	*1.4*	*1.2*	*2.5*	*0*	*4.9*				*3.0*	*4.2*	*4.2*		*2.5*	*4.9*	*0*
Pin No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY									*1.0*	*2.5*	*4.9*	*2.0*	*1.0*	*2.3*	*2.4*		*2.4*	*0*	*2.4*	*2.4*
STOP	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1.0*	*2.5*	*4.9*	*2.0*	*1.0*	*2.0*	*2.4*		*2.4*	*0*	*2.4*	*2.4*
Pin No.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
PLAY	*3.6*	*4.5*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*1.6*	*1.6*	*1.6*	*1.6*	*2.6*	*2.6*	*2.6*	*0*	*2.4*	*2.4*	*2.4*	*2.4*
STOP	*3.6*	*4.5*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*1.6*	*1.6*	*1.6*	*1.6*	*1.4*	*1.4*	*1.4*	*0*	*3.6*	*3.6*	*3.6*	*1.6*
Pin No.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
PLAY	*2.4*				*fluc*		*0.3*	*fluc*	*2.4*	*0.2*	*fluc*	*fluc*	*4.9*	*fluc*	*4.9*	*5*	*0*		*2.3*	*2.3*
STOP	*3.6*				*2.3*		*0.3*		*2.4*	*0*			*4.9*		*4.9*	*5*	*0*	*0*	*2.3*	*2.3*

IC 106 LC97000P-288

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	*fluc*	*4*	*5*	*5*	*fluc*	*fluc*	*---*	*0*	*5*	*5*	*5*	*5*	*0*	*0*	*0*	*5*	*5*	*0*	*0*	*0*
Pin No.	21	22	23	24	25	26	27	28												
PLAY	*0*	*0*	*fluc*	*fluc*	*fluc*	*0*	*0*	*fluc*												

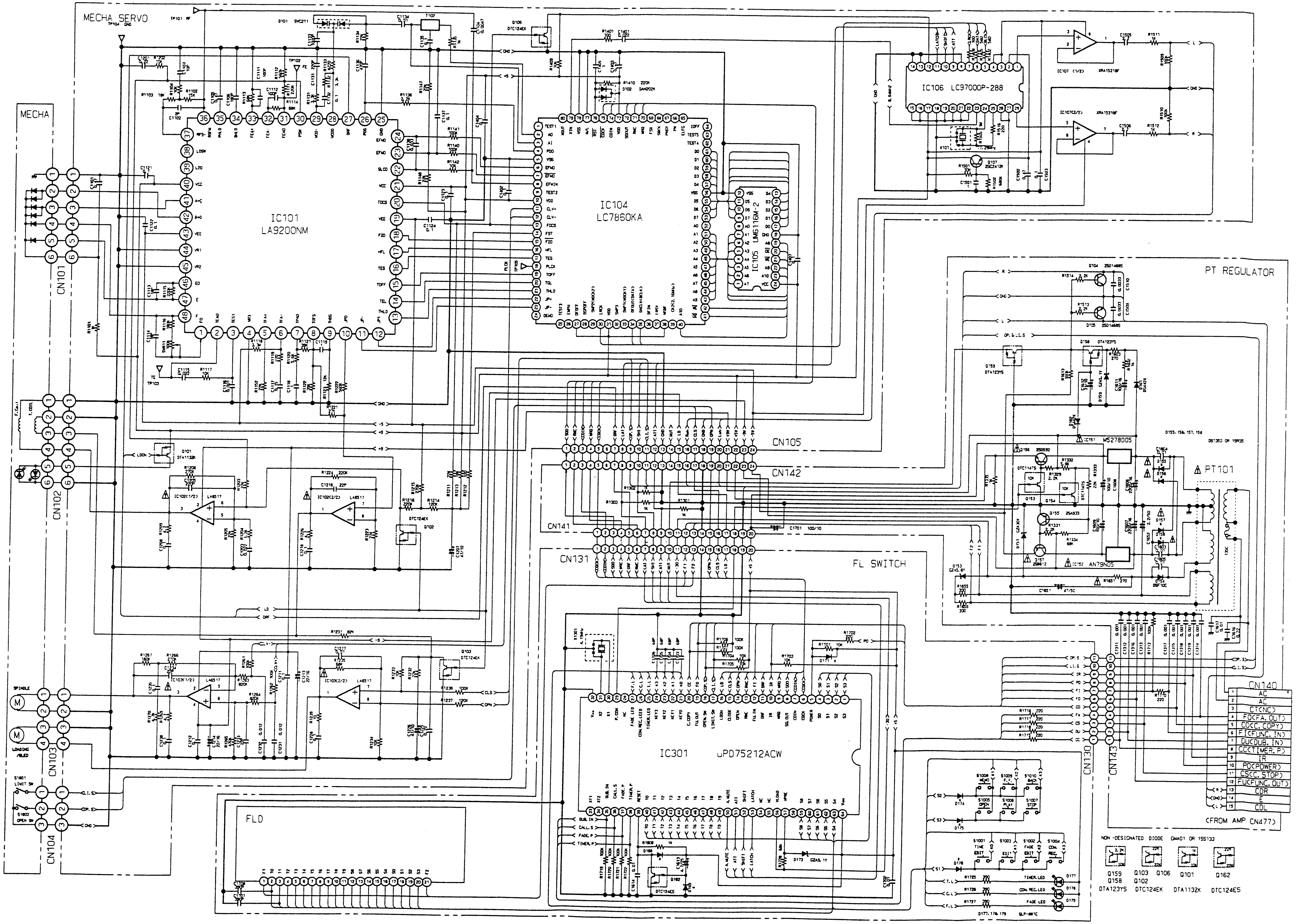
IC 107 XRA15218F

Pin No.	1	2	3	4	5	6	7	8
PLAY	*fluc*	*fluc*	*fluc*	*-5*	*fluc*	*fluc*	*fluc*	*5*

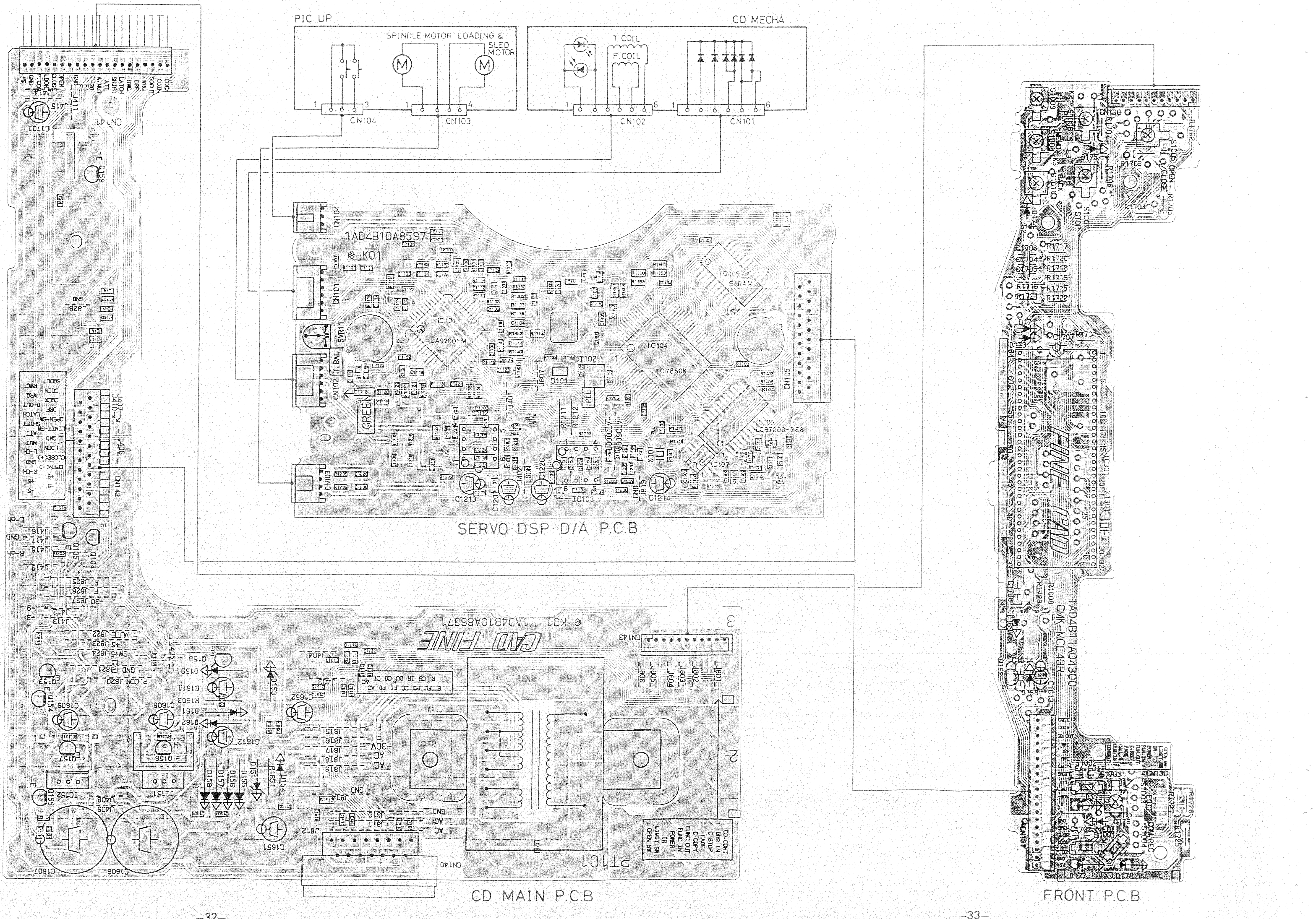
IC 301 µPD75212ACW

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	*fluc*				*5*	*5*	*0*	*0*	*0*	*5*	*4*	*0*	*0*	*5*	*5*	*0*	*5*	*0*	*5*	*fluc*
STOP					*1*						*0*			*opn*	*cls*	*5*	*cls*	*opn*		
Pin No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	*fluc*	*fluc*	*fluc*	*fluc*	*5*	*5*	*5*		*0*	*4.5*	*5.5*	*0*	*0*	*0*					*5*	*fluc*
STOP						*0*	*0*		*5*											
Pin No.	41~49		51	52	53	54	55	56	57	58~63		64								
PLAY	*fluc*		*0*	*5*	*5*			*-32*	*-4*	*fluc*		*5*								
STOP			*5*							*fluc*		*5*								

SCHEMATIC DIAGRAM (CD)


MECHA SERVO
MECHA
IC101
LA9200NM
IC104
LC7860KA
IC105 LM6116M-2
IC106 LC97000P-288
IC107 (1/2) XRA15218F
IC107 (2/2) XRA15218F
CN101
CN102
CN103
CN104
SPINDLE
LOADING /SLED
S1801 LIMIT SW
S1802 OPEN SW
IC102 (1/2) LA6517
IC102 (2/2) LA6517
IC103 (1/2) LA6517
IC103 (2/2) LA6517
CN105
CN142
CN141
CN131
FL SWITCH
IC301
uPD75212ACW
FLD
PT REGULATOR
IC151 M5278D05
IC152 AN79N05
PT101
CN130
CN143
CN140
1 AC
2 AC
3 CT(NC)
4 FO(FA. OUT)
5 CO(C. COPY)
6 FI(FUNC. IN)
7 DU(DUB. IN)
8 CC(TIMER. P)
9 IR
10 PO(POWER)
11 CS(C. STOP)
12 FU(FUNC. OUT)
13 CDR
14 E
15 CDL
(FROM AMP CN477)
NON-DESIGNATED DIODE GMA01 OR 1SS133
Q159 Q158 DTA123YS
Q103 Q106 Q102 DTC124EK
Q101 DTA1132K
Q162 DTC124ES
S1006 MEMO
S1009 F.F
S1010 BACK
S1005 OPEN
S1008 PLAY
S1007 STOP
S1001 TIME EDIT
S1003 EDIT
S1002 EDIT
S1004 FADE REC
TIMER LED
DUB. REC LED
FADE LED
D177, 178, 179 SLP-881C

WIRING DIAGRAM (CD)


PIC UP
SPINDLE MOTOR
LOADING & SLED MOTOR
CD MECHA
T. COIL
F. COIL
CN104
CN103
CN102
CN101
1AD4B10A8597
K01
IC101
LA9200NM
IC104
LC7860K
IC105
S.RAM
SVR11
T.BAL
GREEN
CN105
T102
PLL
D101
X101
IC103
IC107
C1213
C1214
SERVO·DSP·D/A P.C.B
CN141
CN142
CN143
CN140
PT101
CAD FINE
CD MAIN P.C.B
CMK-MCL43R
1AD4B11A04300
CN130
FRONT P.C.B

TRANSISTOR VOLTAGE TABLE (CD)

TRANSISTOR

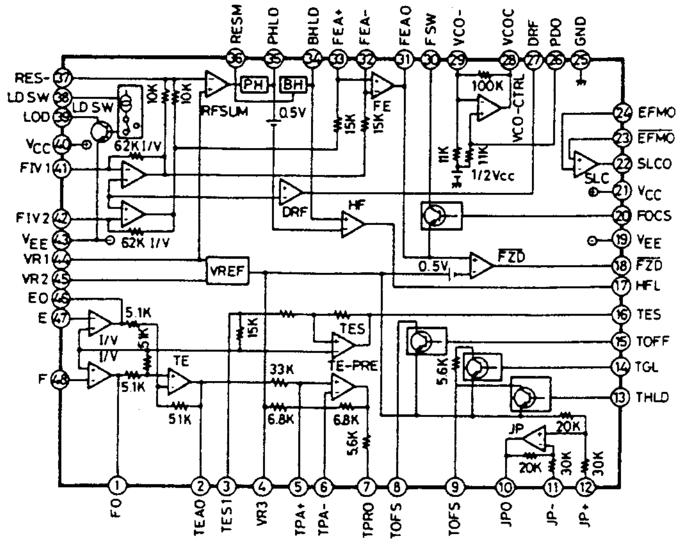
Pin No.	Q101			Q102			Q103			Q104			Q105			Q106			Q107		
	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
PLAY	0	5	0	0	0	0	0	0	0	-5		0	-5		0	5	0	0	5	5	5
STOP	0	0	5	5	0	0	5	0	0	1			1			0	5	0			

Pin No.	Q153			Q154			Q155			Q156			Q157			Q158		
	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
CD	0	5	0	0	5	0	1	-5	0	6	5	5	-6	-5	-5	5	-5	5
OTHER	5	0	0	5	0	0	-1	0	0	0	5	0	0	-5	0	5	5	5

Pin No.	Q159			Q162		
	B	C	E	B	C	E
PLAY	0	-5	0	0	5	0
STOP	0	5	0	0	5	0

IC BLOCK DIAGRAM (CD)

IC 101 LA9200NM (RF-Amplifier · SERVO)


RESM
PHLD
BHLD
FEA+
FEA-
FEAO
FSW
VCO-
VCOC
DRF
PDO
GND
RES-
LD SW
LOD
VCC
FIV1
FIV2
VEE
VR1
VR2
EO
E
F
PH
BH
RFSUM
0.5V
FE
100K
VCO-CTRL
1/2Vcc
SLC
DRF
HF
VREF
FZD
TES
TE-PRE
TE
I/V
62K I/V
5.1K
51K
33K
6.8K
5.6K
15K
10K
11K
20K
30K
JP
EFMO
EFMO
SLCO
Vcc
FOCS
VEE
FZD
HFL
TES
TOFF
TGL
THLD
FO
TEAO
TES1
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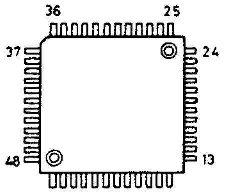
TPA-
TPRO
TOFS
TOFS
JPO
JP-
JP+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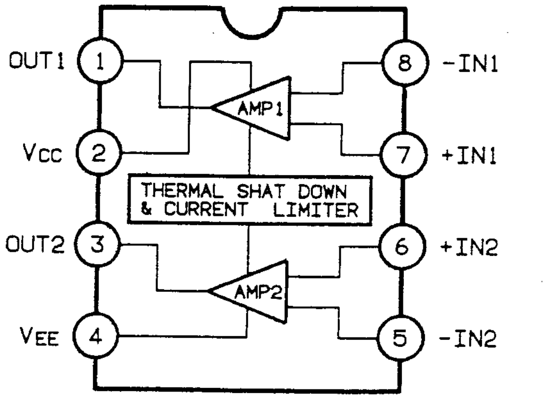
IC 102 · 103 LA6517 (Dual Operational Amplifier)


OUT1
Vcc
OUT2
VEE
-IN1
+IN1
+IN2
-IN2
AMP1
AMP2
THERMAL SHAT DOWN
& CURRENT LIMITER
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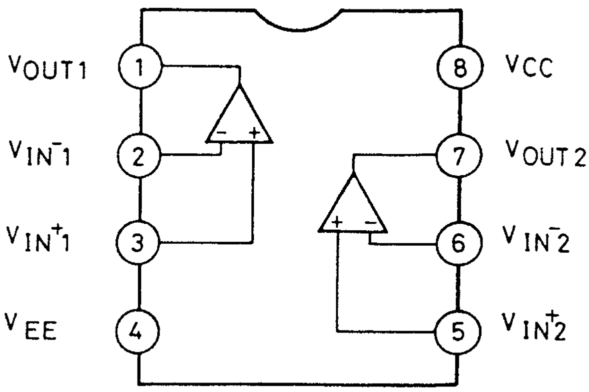
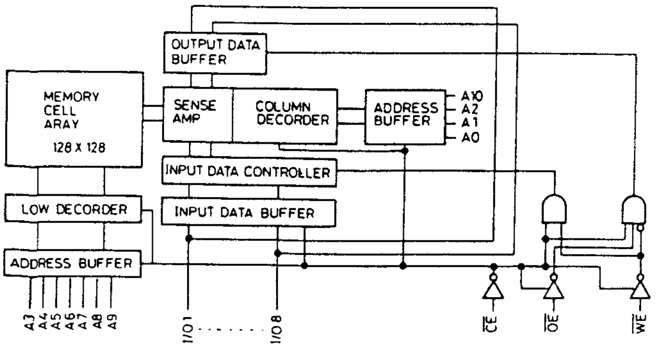
3
4
5
6
7
8

IC 107 XRA15218F (Dual Operational Amplifier)


VOUT1
VIN-1
VIN+1
VEE
VCC
VOUT2
VIN-2
VIN+2
1
2
3
4
5
6
7
8

IC 105 UM6116M-2 (2×8 16 CMOS SRAM)


OUTPUT DATA BUFFER
MEMORY CELL ARAY 128 X 128
SENSE AMP
COLUMN DECORDER
ADDRESS BUFFER
A10
A2
A1
A0
INPUT DATA CONTROLLER
LOW DECORDER
INPUT DATA BUFFER
ADDRESS BUFFER
A3
A4
A5
A6
A7
A8
A9
I/O1
I/O8
CE
OE
WE

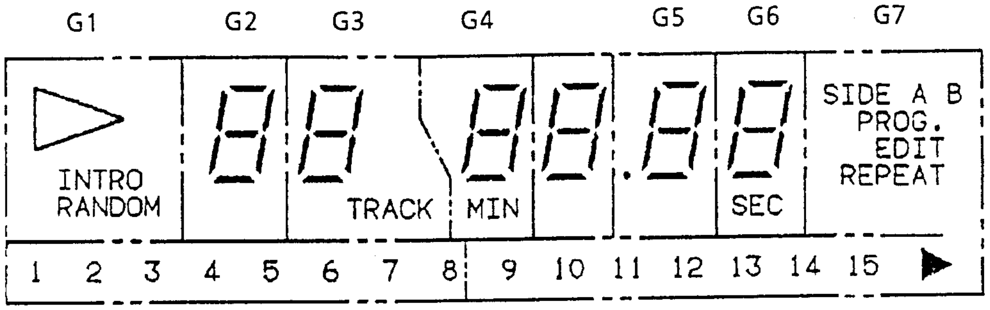
IC BLOCK DIAGRAM (CD)

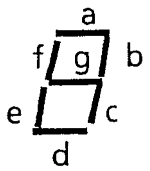
IC104 LC7860KA (Digital Signal Processor)

No.	PIN NAME	I/O	FUNCTION
1	TEST 1	I	Test pin. Normally not connected.
2 3 4	AO AI PDO	O I O	VCO is generated by connecting resonance circuit between AI and AO (8.6436MHz). PDO is phase output with EFM signal, and is set to increase frequency when "+".
5	V_{SS}	-	GND
6 7 8	$\overline{EFMO}$ EFMO EFMIN	O O I	1 to 2V^{P-P} HF signal is input to EFMIN. Output from EFMO and $\overline{EFMO}$ passes through amplitude limiter and reverse phase EFM signal is obtained from both. This performs slice level control.
9	TEST 2	I	Test pin. Normally not connected.
10	V_{DD}	-	+5V
11 12	CLV + VCO -	O O	Disk motor control output.
13 14 15	FOCS $\overline{FST}$ FZD	O O I	Focus servo is off when FOCS is HIGH. The lens is lowered by FST and then FST is HIGH, the lens is gradually pulled up. FOCS is reset when $\overline{FZD}$ is generated. For focus-in.
16 17	HFL TES	I I	Kick pulses, JP+ and JP-, are generated according to track jump command. A jump of the prescribed number of tracks is (1, 4, 16, 64).
18	FSEQ/ PCK	O	When 4.3218MHz PCK monitor terminal/DEMO is HIGH both SYNC detected from EFM signal and SYNC of counter are the same at HIGH.
19 20 21 22 23	TOFF TGL THLD JP + JP -	O O O O O	Kick pulses, JP+ and JP-, are generated according to track jump command. A jump of the prescribed number of tracks is (1, 4, 16, 64).
24	DEMO	I	Set and sound output adjustment pin function.
25	TEST 3	I	Test pin. Normally not connected.
26	EMPH	O	De-emphasis is necessary when HIGH.
27	DFOFF	I	ON/OFF switch for digital filter. No filtering when HIGH.
28	DSPOFF	I	Test pin. Normally LOW.
29 30	SMP 2 LRCLK	O O	Signal output to DAC and signal for L/R switching and sample hold.
31	V_{DD}	-	+5V
32 33 34 35	SMP 3 SMP 1 DFOUT DACLK	O O O O	Signal output to DAC and signal for L/R switching and sample hold.
36 37	DFIN LRSY	I/O O	Signal output for CD-ROM. CD-ROM sync signal.
38	MSBF	I	Signal output to DAC and signal for L/R switching and sample hold.
39	CK 2	O	2.1609MHz
40	AD10	O	RAM address output.
41 42	$\overline{OE}$ WE	O O	Output state when $\overline{WE}$ = L and input state when $\overline{WE}$ = H. $\overline{OE}$ is for input/output control.
43 44 45 46 47 48 49 50 51 52	AD09 AD08 AD07 AD06 AD05 AD04 AD03 AD02 AD01 AD00	O O O O O O O O O O	RAM address output.
53 54 55	DB7 DB6 DB5	I/O I/O I/O	DB7 to DB0 : Connected to RAM data pins.
56	V_{SS}	-	GND
57 58 59 60 61	DB4 DB3 DB2 DB1 DB0	I/O I/O I/O I/O I/O	DB7 to DB0 : Connected to RAM data pins.
62 63	TEST 4 TEST 5	I I	Test pin. Normally not connected.
64	IOFF	I	For CD ROM. HIGH time interpolation and holding of previous value not performed.
65	EFLG	O	C1/C2 1-level and 2-level error correction.
66 67 68	PW PWSY SBCK	O O I	PWSY is SYNC combining main and sub and change from HIGH to LOW is taken externally. The P, Q, R, S, T, U, V, and W subcodes are read by sending 8 clock pulses to SBCK.
69	FSX	O	7.35kHz sync signal output.
70 71 72 74 75 77	WRQ RWC SQOUT COIN CQCK M/L	O I O I I I	WRQ goes HIGH when data of subcode Q passes CRC check. This is taken externally and the data from SQOUT is read by sending $\overline{CQCK}$. When data is required with LSB first, M/L is driven LOW. After the micro-processor sets RWC to HIGH, the command is given by output synchronized with the $\overline{CQCK}$ command data.
73	V_{DD}	-	+5V
76	$\overline{RES}$	I	Goes LOW once when power is turned on.
78	V_{SS}	-	GND
79 80	XIN XOUT	I O	Pin for connection to 8.6436MHz crystal oscillator.

IC BLOCK DIAGRAM (CD)

FLD (CD Fluorescent Display)





Segment Map

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
S1		a	a	a	a	a	a	SIDE	1	9
S2	INTRO	b	b	b	b	b	b	A	2	10
S3	RANDOM	f	f	f	f	f	f	B	3	11
S4		g	g	g	g	g	g	PROG.	4	12
S5		e	e	e	e	e	e	EDIT	5	13
S6		e	e	e	e	e	e	REPEAT	6	14
S7		d	d	d	d	d	d		7	15
S8			TRACK	-	MIN		SEC		8	▶

Pin Assignment

PIN No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Segment Name	F1	F1	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	G8	G7	G6	G5	G4	G3	G2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
F1	F1	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	G8	G7	G6	G5	G4	G3	G2

IC106 LC97000P-288 (D/A converter)

No.	Symbol	I/O	Function description
1	L-CH	O	DAC CH-1 output pin
2	VRH	R	Reference voltage "H" input pin
3	AVDD	P	Analog system power supply pin
4	DVDD	P	Digital system power supply pin
5	BCLK	I	Bit CLOCK pin
6	DATA	I	Digital audio data input pin Input in bit serial from MSB
7	LRCK	I	LR CLOCK input pin LRCK = "H" CH1 LRCK = "L" CH2
8	TEST	I	Test pin (normally "L")
9	ATT	I	Attenuation data input pin Input in bit serial from LSB
10	SHIFT	I	Attenuation data shift CLOCK input pin
11	LATCH	I	Attenuation data latch CLOCK input pin
12	INITB	I	Initializing signal input pin (normally "H")
13	TEST	I	Test pin (normally "L")
14	EMPH2	I	De-emphasis set pin
15	EMPH1	I	De-emphasis set pin
16	D/N	I	Normal/double speed switch pin
17	SOC2	I	Input source select pin
18	SOC1	I	Input source select pin
19	MODE	I	Operation mode set pin
20	TEST	I	Test pin (normally "L")
21	TEST	I	Test pin (normally "L")
22	DGND	P	Digital system GROUND pin
23	CLKOUT	O	CLOCK output pin At 392Fs :1/2 XOUT At 384Fs, 448Fs, 512Fs : 1/4 XOUT
24	XIN	I	Crystal oscillation input pin.
25	XOUT	O	Crystal oscillation output pin.
26	AGND	P	Analog system GROUND pin.
27	VRL	R	Reference voltage "L" input pin.
28	R-CH	O	DAC CH-2 output pin

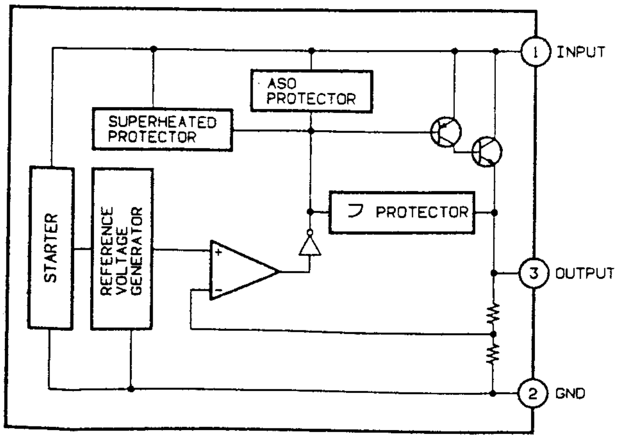
IC BLOCK DIAGRAM (CD)

IC301 μPD75212ACW-256 (4 Bit Micro Processor)

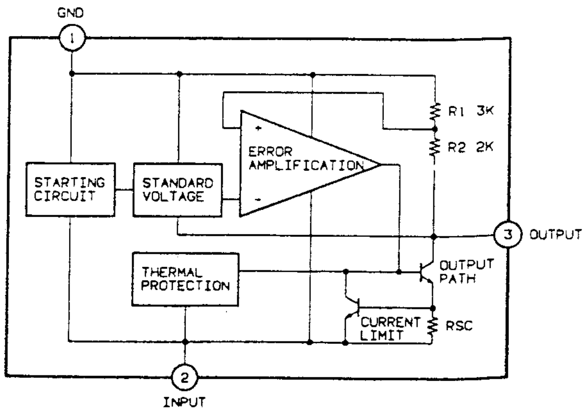
No	Pin name	Description
1	S3	FL Segment Signal Output & Key scan output
2	S2	FL Segment Signal Output & Key scan output
3	S1	FL Segment Signal Output & Key scan output
4	S0	FL Segment Signal Output & Key scan output
5	P CHK	Power detect (ON / $\overline{\text{OFF}}$)
6	CQCK	LC7860KA interface (clock)
7	COIN	LC7860KA interface (SUBQ data)
8	SQOUT	LC7860KA interface (command data)
9	WRQ	LC7860KA interface (SUBQ trigger)
10	IR	Remote control signal input
11	DRF	Detected for RF signal (ON / $\overline{\text{OFF}}$)
12	FUNCT	Function input (CD Time = LOW)
13	RWC	LC7860KA interface(data latch)
14	OPEN	Tray drive motor (SLED motor) control
15	CLOSE	Tray drive motor (SLED motor) control
16	$\overline{\text{LDON}}$	LASER ON / OFF OUTPUT
17	LIMIT SW	PICK Limit SW input ($\overline{\text{ON}}$ / OFF)
18	OPEN SW	Open SW input ($\overline{\text{ON}}$ / OFF)
19	AF OUT	Auto function signal output (for DECK and AMP)
20	C COPY	Computer copy signal output (for DECK) High
21	KEY0	KEY input
22	KEY1	KEY input
23	KEY2	KEY input
24	KEY3	KEY input
25	TIME LED	Time edit LED display (Disp. $\overline{\text{ON}}$ / OFF/)
26	DUB LED	Dubbing LED display (Disp. $\overline{\text{ON}}$ / OFF/)
27	FADE LED	FADE LED Lighting (Disp. $\overline{\text{ON}}$ / OFF/)
28	PD PORT	Not used
29	P CON	Power control (PW ON/OFF)
30	X1	Clock generator input (4.19MHz)
31	X2	Clock generator output.(19MHz)
32	Vss	GND
33	XT1	Not used (GND)

No	Pin name	Description
34	XT2	Not used (Open)
35	DUB IN	Dubbing input (from DECK)
36	C STOP	Call Stop Signal input
37	CD FADE	Timer play signal input (from TUNER)
38	CD CONT	Timer play signal input (from TUNER)
39	$\overline{\text{RESET}}$	Reset input
40	T0	FL Digit Signal Output
41	T1	FL Digit Signal Output
42	T2	FL Digit Signal Output
43	T3	FL Digit Signal Output
44	T4	FL Digit Signal Output
45	T5	FL Digit Signal Output
46	T6	FL Digit Signal Output
47	T7	FL Digit Signal Output
48	T8	FL Digit Signal Output
49	T9	FL Digit Signal Output
50	LATCH	DAC Control Output (Latch)
51	SHIFT	DAC Control Output (Clock)
52	ATT	DAC Control Output (Data)
53	A MUTE	Analog Mute Signal
54	S11	
55	S10	
56	VLOAD	Power source for pull down of FL display terminal
57	VPRE	Power source for output buffer of FL display terminal
58	S9	FL Segment Signal & Key Scan output
59	S8	FL Segment Signal & Key Scan output
60	S7	FL Segment Signal & Key Scan output
61	S6	FL Segment Signal & Key Scan output
62	S5	FL Segment Signal & Key Scan output
63	S4	FL Segment Signal & Key Scan output
64	VDD	Power (+5V)

IC151 M5278D05 (3 Terminal Voltage Regulator)



IC152 AN79N05 (3 Terminal Voltage Regulator)



TAPE DECK UNIT (CR-WG5)

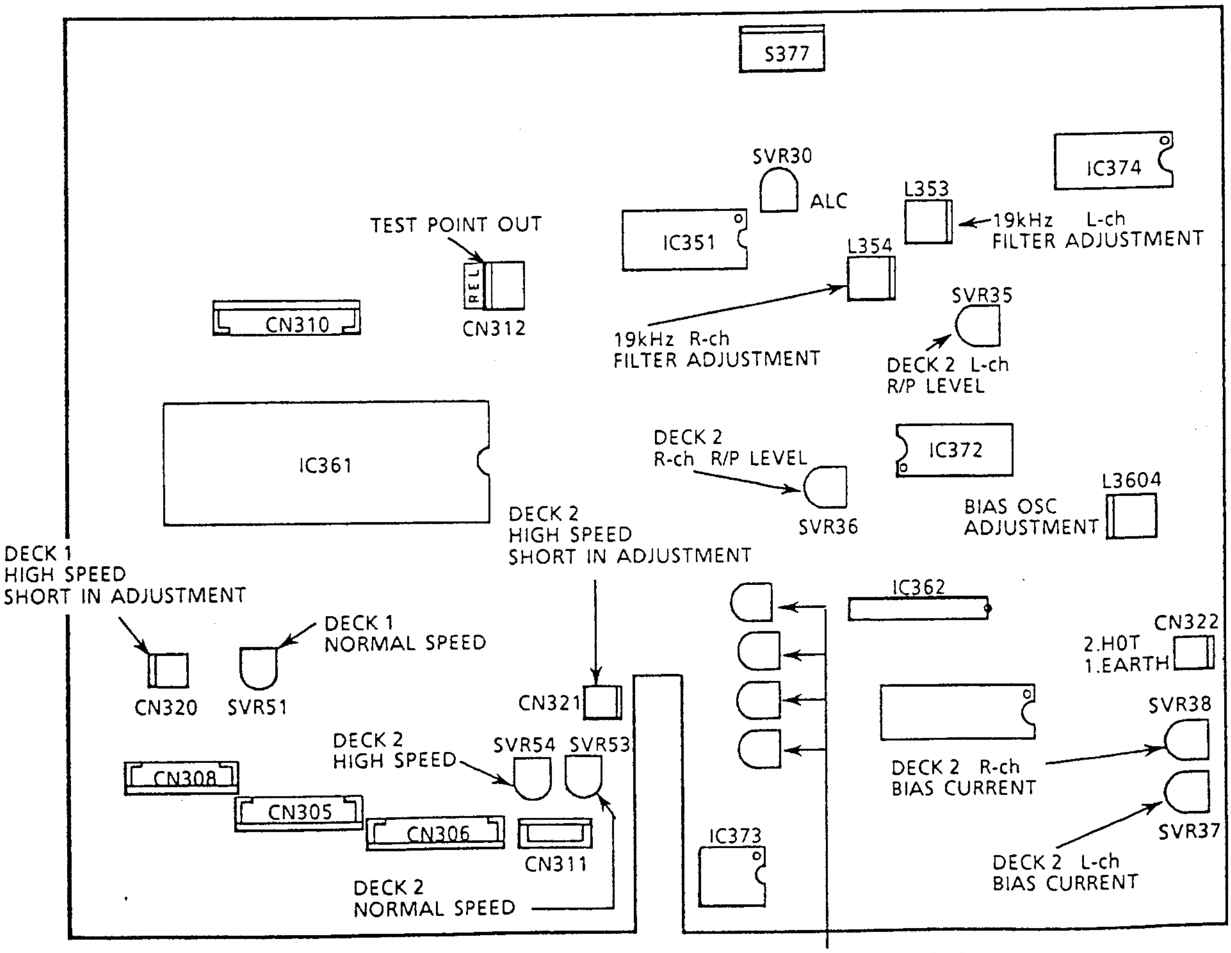
TAPE DECK ADJUSTMENT

1, AMPLIFIER ADJUSTMENT

	ITEM	TEST TAPE	INPUT	DOLBY	OUTPUT	ADJUST POINT	REMARKS
1	Head Azimuth	VTT738	----	----	TP OUT CN312	Azimuth Screw	Adjust screw so that 10kHz output become maximum. (FWD / REV)
2	Playback Level	TCC130	----	OFF	TP OUT CN312	SVR31,32 (DECK A) SVR33,34 (DECK B)	Adjust SVR so that TAPE OUT output become 0.775V.
3	OSC	AC224	107kHz	OFF	TP OSC CN322	L3604	Beat Cancel SW1 : Adjust 107 kHz Beat Cancel SW2 : Confirm 103 ± 2kHz
4	19kHz Filter	AC224	19kHz ± 10Hz (-5dB)	OFF	TP OUT CN312	L353 (L-ch) L354 (R-ch)	Set frequency 400Hz output to 0dB. Adjust SVR so that 19kHz output become -30dB.
5	Rec / Play Frequency	AC224	1kHz (-25dB) 10kHZ (-25dB)	ON	TP OUT CN312	SVR37 (L-ch) SVR38 (R-ch)	Set frequency 1kHz output to 0dB. Adjust SVR so that 10kHz output become +1dB.
6	Rec / Play Level	AC224	1kHz (-5dB)	OFF	TP OUT CN312	SVR35 (L-ch) SVR36 (R-ch)	Adjust to obtain same output of 1kHz and 10kHz.

Note.
1. Head azimuth : Be sure both channels (L and R) are the same level and phase. [Both mechanism (DECK 1 and DECK 2)]
2. During adjustment measurement Beat cancel SW is at 1 condition fundamentally, confirm R / P frequency characteristic dolby effect also by 2 condition.

2, PARTS LOCATION


S377
SVR30
ALC
IC374
L353
19kHz L-ch
FILTER ADJUSTMENT
TEST POINT OUT
IC351
L354
REL
CN310
CN312
19kHz R-ch
FILTER ADJUSTMENT
SVR35
DECK 2 L-ch
R/P LEVEL
IC361
DECK 2
R-ch R/P LEVEL
IC372
L3604
BIAS OSC
ADJUSTMENT
SVR36
DECK 2
HIGH SPEED
SHORT IN ADJUSTMENT
DECK 1
HIGH SPEED
SHORT IN ADJUSTMENT
IC362
CN322
2.HOT
1.EARTH
DECK 1
NORMAL SPEED
CN320
SVR51
CN321
SVR38
DECK 2
HIGH SPEED
SVR54
SVR53
CN308
CN305
CN306
CN311
DECK 2 R-ch
BIAS CURRENT
IC373
SVR37
DECK 2 L-ch
BIAS CURRENT
DECK 2
NORMAL SPEED

PLAYBACK LEVEL

	L-ch	R-ch
DECK 1	SVR 31	SVR 32
DECK 2	SVR 33	SVR 34

TAPE DECK ADJUSTMENT & TORQUE

3. TAPE SPEED ADJUSTMENT

Note ; ①. Operate the Mechanism with the normal speed.
②. Begin from the high speed in Motor speed adjustment.

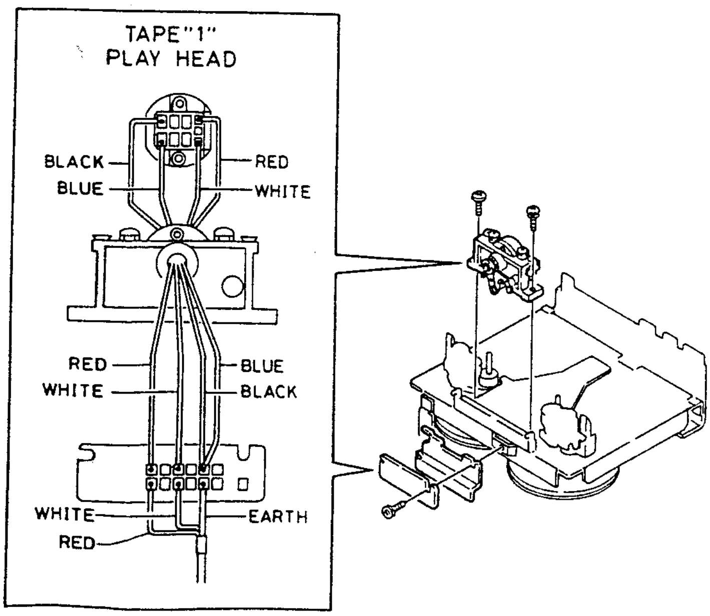
1) Set the test tape TCW-211 (or equivalent) to both mechanism (Deck 1 / Deck 2).
Adjustment should be made at the center portion (FWD Play) on the tape.
2) Play the mechanism in FWD Play.
3) Short the high speed test pin to the high speed portion. (by the clip.)
4) Confirm the indication of the tape speed counter in Deck 1.
Adjust the tape speed in Deck 2 so as to match in Deck 1. (It is not SVR : high speed in Deck 1.)
Confirm so that a frequency counter reading of high speed become 3000Hz ± 10% in Deck 1.
5) Adjust SVR54 so that a frequency counter reading become ± 5Hz in Deck 2 at the FWD Play and near tape center than in Deck 1.
Example -- Deck 1 : 3000Hz → Deck 2 : 3000Hz ± 5Hz
6) Remove the short by the clip, open the high speed test pin. (Normal speed)
7) Stop the mechanism drive.
8) Set the test tape MTT-111 (or equivalent) to both mechanism (Deck 1 / Deck 2).
Adjustment should be made at the center portion (FWD Play) on the tape.
9) Play the Mechanism (FWD Play).
10) Adjust SVR51 so that a frequency counter reading become 3000Hz ± 5Hz in Deck 1 at the FWD Play and near the tape center.
11) Adjust SVR53 so that a frequency counter reading become 3000Hz ± 5Hz in Deck 2 at the FWD Play and near the tape center.
12) Stop the mechanism drive.

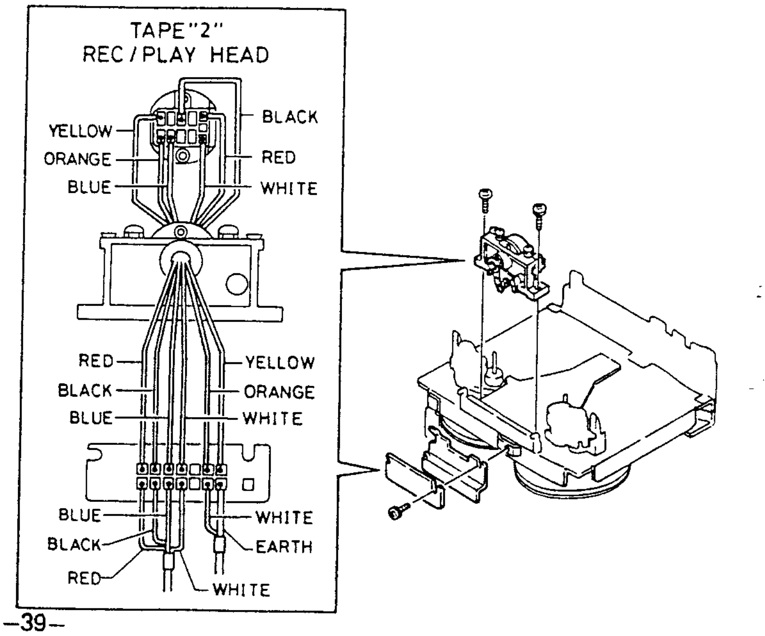
4. CHECKING THE MECHANISM TORQUES

Note : Clean the head, capstan and pinch roller before making any measurement.

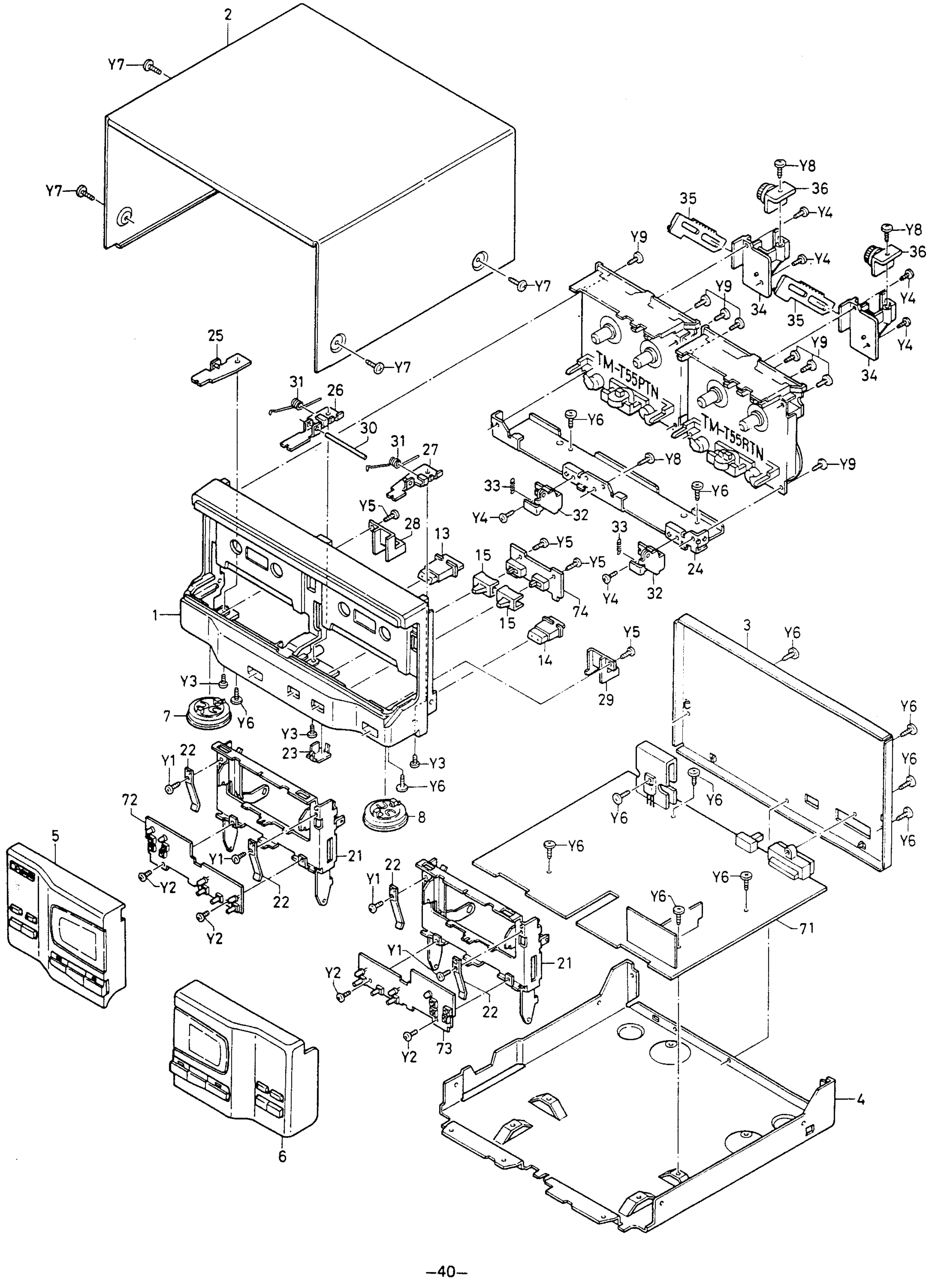
ITEM	TAKE-UP TORQUE	BACK TENSION	PULLEY TENSION
Test cassette	PLAY (FWD) : TW2111A PLAY (REW) : TW2121A F.FWD / REW : TW2231	PLAY (FWD) : TW2111A PLAY (REW) : TW2121A	Driving power cassette : PLAY (FWD) : TW-2412 PLAY (REW) : TW2422
PLAY	30~60gr.cm	2.0~5.0gr.cm	more than 80gr
F.FWD	55~140gr.cm	------	------
REW	55~140gr.cm	------	------

5. HEAD REPLACEMENT


TAPE"1"
PLAY HEAD
BLACK
BLUE
RED
WHITE
RED
WHITE
BLUE
BLACK
WHITE
RED
EARTH


TAPE"2"
REC / PLAY HEAD
YELLOW
ORANGE
BLUE
BLACK
RED
WHITE
RED
BLACK
BLUE
YELLOW
ORANGE
WHITE
BLUE
BLACK
RED
WHITE
EARTH
WHITE

PARTS LIST (TAPE DECK)


2
Y7
Y7
Y7
Y7
Y8
36
35
Y4
Y9
Y8
Y4
36
Y9
Y4
34
35
Y4
Y9
34
TM-T55PTN
TM-T55RTN
25
31
26
30
31
27
Y6
Y8
Y9
33
Y6
Y5
28
32
Y4
13
33
Y5
15
Y5
24
Y4
32
74
1
15
3
Y6
Y5
14
29
Y3
7
Y6
Y6
Y3
23
Y3
Y6
Y1
22
Y6
Y6
Y6
Y6
8
72
Y6
5
Y1
21
Y6
22
Y2
Y1
22
Y6
Y2
71
Y1
21
Y2
22
Y2
73
6
4

EXPLODED VIEW (TAPE DECK)

CABINET & CHASSIS (CR-WG5)

REF.NO.	PART NO.	DESCRIPTION
1	614 236 2396	ASSY,PANEL,FRONT(B)
	614 236 2389	ASSY,PANEL,FRONT(W)
2	614 230 9285	ASSY,CABINET(B)
	614 236 1979	ASSY,CABINET(W)
3	614 236 1481	PANEL,REAR
4	614 227 5665	ASSY,CABINET,BOTTOM
5	614 236 2006	ASSY,COVER,DECK 1(B)
	614 236 1993	ASSY,COVER,DECK 1(W)
6	614 236 2020	ASSY,COVER,DECK 2(B)
	614 236 2013	ASSY,COVER,DECK 2(W)
7	614 234 7218	ASSY,FOOT,FRONT-L
8	614 234 7225	ASSY,FOOT,FRONT-R
13	614 236 1740	BUTTON,EJECT,DECK 1(W)
	614 227 1704	BUTTON,EJECT,DECK 1(B)
14	614 236 1757	BUTTON,EJECT,DECK 2(W)
	614 227 1711	BUTTON,EJECT,DECK 2(B)
15	614 236 1627	KNOB,SLIDE,MODE·DOLBY(W)
	614 227 1575	KNOB,SLIDE,MODE·DOLBY(B)
21	614 227 1049	ASSY,LID,CASSETTE
22	614 227 2114	SPRING,PLATE,TAPE COMP
23	614 227 1940	STOPPER,SHAFT
24	614 227 1797	BRACKET-M,MECHA
25	614 227 5702	ASSY,BRACKET-M,LID (LEFT)
26	614 227 1803	BRACKET-M,LID (CENTER)
27	614 227 5719	ASSY,BRACKET-M,LID (RIGHT)
28	614 227 1919	MOUNT-M,LEAD WIRE DECK1
29	614 227 1926	MOUNT-M,LEAD WIRE DECK2
30	614 227 1964	SHAFT,LID (CENTER)
31	614 227 2145	SPRING,WIRE,LID OPEN
32	614 227 5726	ASSY,LEVER,EJECT
33	614 227 2084	SPRING,TENS,EJECT
34	614 227 4231	MOUNT-M,DUMPER
35	614 227 2077	SLIDE,DUMPER
36	614 069 0378	GEAR ASSY,DUMPER
	614 125 6443	CUSHION,WIRE FIX

FIXING PARTS (CR-WG5)

REF.NO.	PART NO.	DESCRIPTION
Y1	411 129 0206	SCR S-TPG PAN 2X3
Y2	411 028 5609	SCR S-TPG PAN 2.6X4
Y3	411 028 6200	SCR S-TPG PAN 2.6X6
Y4	411 021 2704	SCR S-TPG BIN 2.6X6
Y5	411 021 1806	SCR S-TPG BIN 2.6X10
Y6	411 021 6405	SCR S-TPG BIN 3X8
Y7	411 021 6603	SCR S-TPG BIN 3X8(B)
	411 098 4205	SCR S-TPG BIN 3X8(W)
Y8	411 021 3503	SCR S-TPG BIN 3X10
Y9	411 021 6603	SCR S-TPG BIN 3X8

ELECTRICAL PARTS (CR-WG5)

REF.NO.	PART NO.	DESCRIPTION
CN351	614 227 0868	ASSY,CONNECTOR-S,3P,P HEAD LEAD
CN352	614 227 0875	ASSY,CONNECTOR-S,5P,R/P HEAD LEAD
CN353	614 227 0882	ASSY,CONNECTOR-S,2P,E HEAD LEAD
CN358	614 229 4543	ASSY,CONNECTOR-S,9P,DECK 1 MECHA LEAD
CN359	614 227 0899	ASSY,CONNECTOR-S,4P,DECK 1 MOTER LEAD
CN360	614 229 4550	ASSY,CONNECTOR-S,12P,DECK 2 MECHA LEAD
CN361	614 227 0905	ASSY,CONNECTOR-S,4P,DECK 2 MOTER LEAD

DECK MAIN P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 237 0056	ASSY,PCB,DECK MAIN
C3613	403 080 6106	POLYPRO 0.01U J 100V
C3901	403 038 4505	ELECT 1000U M 6.3V
C3999	403 200 0304	ELECT 3300U M 35V
CN301	614 017 2546	PLUG,3P,FOR P HEAD
CN302	614 017 2560	PLUG,5P,FOR R/P HEAD
CN303	614 017 2539	PLUG,2P,FOR E HEAD
CN304	614 227 2978	SOCKET,15P,TO AMP. UNIT
CN305	614 017 2614	PLUG,10P,FOR DECK 1 MODE SW
CN306	614 017 2621	PLUG,11P,FOR DECK 2 MODE SW
CN307	614 017 2553	PLUG,4P,FOR MODE SW
CN308	614 017 2607	PLUG,9P,FOR DECK 1 MECHA
CN309	614 017 2119	PLUG,4P,FOR DECK 1 MOTOR
CN310	614 017 2638	PLUG,12P,FOR DECK 2 MECHA
CN311	614 017 2119	PLUG,4P,FOR DECK 2 MOTER
CN312	614 016 3858	PLUG,3P,FOR SIGNAL TEST POINT
CN320	614 016 4084	PLUG,2P,FOR HI SPEED TEST POINT
CN321	614 016 4084	PLUG,2P,FOR HI SPEED TEST POINT
CN322	614 016 4084	PLUG,2P,FOR E HEAD TEST POINT
D300	407 053 5905	ZENER DIODE MTZ4.7C
D348	407 005 4505	DIODE DS442X
D349	407 012 4406	DIODE 1SS133
D351	407 005 4505	DIODE DS442X
D352	407 005 4505	DIODE DS442X
D353	407 005 4505	DIODE DS442X
D354	407 012 4406	DIODE 1SS133
D356	407 012 4406	DIODE 1SS133
D357	407 005 4505	DIODE DS442X
D361	407 012 4406	DIODE 1SS133
D362	407 012 4406	DIODE 1SS133
D363	407 012 4406	DIODE 1SS133
D364	407 005 4505	DIODE DS442X
D366	407 005 4505	DIODE DS442X
D367	407 005 4505	DIODE DS442X
D368	407 012 4406	DIODE 1SS133
D369	407 012 4406	DIODE 1SS133
D370	407 012 4406	DIODE 1SS133
D391	407 140 7201	DIODE DSR-10C-ET5
D392	407 140 7201	DIODE DSR-10C-ET5
D395	407 053 3901	ZENER DIODE MTZ16B
D396	407 053 7206	ZENER DIODE MTZ6.2C
D397	407 012 4406	DIODE 1SS133
D398	407 053 6803	ZENER DIODE MTZ5.6C
D399	407 063 7807	ZENER DIODE MTZ13A
D3501	407 003 5009	DIODE DA203.FOR ALC
D3551	407 003 5009	DIODE DA203.FOR ALC
HS001	614 117 1760	SHIELD PLATE,FOR HEAD
HS002	614 203 7362	HEAT SINK,FOR MOTOR
HS004	614 229 2396	SHIELD,FOR NOISE
IC351	409 239 5204	IC CXA1100P,DOLBY
IC361	410 072 3401	IC LC66508B-4119,MICON
IC362	409 016 5502	IC LA2000,AMSS
IC363	409 241 5308	IC BA3126N,HEAD SWITCH
IC371	409 121 8702	IC LA3246,PLAY AMP
IC372	409 241 4400	IC CXA1398P
ICP364	⚠614 205 2891	IC PROTECTOR ICP-N15
ICP365	⚠614 205 2891	IC PROTECTOR ICP-N15
ICP366	⚠614 205 2921	IC PROTECTOR ICP-N38
L351	614 210 3722	INDUCTOR,FERITE
L352	614 210 3722	INDUCTOR,FERITE
L353	614 228 8139	FILTER,LC,MPX
L354	614 228 8139	FILTER,LC,MPX
L364	614 212 0798	TRANS,OSC
L371	614 210 3722	INDUCTOR,FERITE
L372	614 029 3166	MX COIL
L381	614 210 3722	INDUCTOR,FERITE
L382	614 029 3166	MX COIL
L391	614 028 4256	FILTER

PARTS LIST (TAPE DECK)

REF.NO.	PART NO.	DESCRIPTION
Q301	405 004 5103	TR 2SA608-G-SPA
Q302	405 007 6701	TR 2SB598-F-NP
Q303	405 007 6701	TR 2SB598-F-NP
Q304	405 007 6701	TR 2SB598-F-NP
Q305	405 004 5103	TR 2SA608-G-SPA
Q306	405 007 6701	TR 2SB598-F-NP
Q307	405 007 6701	TR 2SB598-F-NP
Q308	405 007 6701	TR 2SB598-F-NP
Q332	405 000 3400	TR DTC114TS
Q333	405 018 0200	TR 2SC3331-U
Q334	405 018 0200	TR 2SC3331-U
Q335	405 000 3806	TR DTC114YS
Q336	405 000 3400	TR DTC114TS
Q337	405 075 8300	TR DTC124TS
Q338	405 000 3400	TR DTC114TS
Q339	405 000 0508	TR DTA114ES
Q340	405 000 3400	TR DTC114TS
Q341	405 000 3400	TR DTC114TS
Q342	405 000 3400	TR DTC114TS
Q343	405 000 3400	TR DTC114TS
Q344	405 000 3806	TR DTC114YS
Q345	405 000 3400	TR DTC114TS
Q346	405 000 3400	TR DTC114TS
Q347	405 000 3400	TR DTC114TS
Q348	405 000 3806	TR DTC114YS
Q349	405 000 3806	TR DTC114YS
Q350	405 004 5103	TR 2SA608-G-SPA
Q351	405 017 9709	TR 2SC3330-U
Q352	405 017 9709	TR 2SC3330-U
Q353	405 017 9709	TR 2SC3330-U
Q354	405 017 9709	TR 2SC3330-U
Q356	405 000 0508	TR DTA114ES
Q357	405 018 5403	TR 2SC3495
Q358	405 000 0508	TR DTA114ES
Q361	405 000 0508	TR DTA114ES
Q362	405 025 0200	TR 2SD734-G
Q363	405 000 3806	TR DTC114YS
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Q370	405 000 3400	TR DTC114TS
Q372	405 075 8300	TR DTC124TS
Q373	405 075 8300	TR DTC124TS
Q374	405 033 6805	TR 2SD1468S-S
Q382	405 075 8300	TR DTC124TS
Q383	405 075 8300	TR DTC124TS
Q384	405 033 6805	TR 2SD1468S-S
Q389	405 035 7107	TR 2SD1913-R
Q391	405 035 7107	TR 2SD1913-R
Q392	405 035 7107	TR 2SD1913-R
Q393	405 023 5306	TR 2SD400-F
Q394	405 023 5306	TR 2SD400-F
Q395	405 017 9709	TR 2SC3330-U
Q396	405 017 9709	TR 2SC3330-U
Q397	405 000 3400	TR DTC114TS
Q398	405 000 3806	TR DTC114YS
R3615	⚠402 052 1101	FUSIBLE RES 3.3 J-1/4W
R3901	⚠402 052 1101	FUSIBLE RES 3.3 J-1/4W
R3902	401 068 6209	OXIDE-MT 5.6 JA 2W
R3903	401 068 6209	OXIDE-MT 5.6 JA 2W
R3908	⚠402 051 7708	FUSIBLE RES 47 J-1/4W
R3992	⚠402 051 7708	FUSIBLE RES 47 J-1/4W
R3994	401 060 4104	OXIDE-MT 2.2K JA 1W
R3996	401 058 2501	OXIDE-MT 100 JA 1W
RA361	614 217 1356	RESISTOR 10K X10
RA362	614 217 1387	RESISTOR 10K X13

REF.NO.	PART NO.	DESCRIPTION
S377	614 012 4316	SWITCH,FOR BEAT CANCEL
SVR30	614 226 3891	POTENTIOMETER,10K(B),ALC ADJ
SVR31	614 226 3891	POTENTIOMETER,10K(B),PLAY GAIN ADJ,DECK 1(L-CH)
SVR32	614 226 3891	POTENTIOMETER,10K(B),PLAY GAIN ADJ,DECK 1(R-CH)
SVR33	614 226 3891	POTENTIOMETER,10K(B),PLAY GAIN ADJ,DECK 2(L-CH)
SVR34	614 226 3891	POTENTIOMETER,10K(B),PLAY GAIN ADJ,DECK 2(R-CH)
SVR35	614 226 3891	POTENTIOMETER,10K(B),REC GAIN ADJ,DECK 2(L-CH)
SVR36	614 226 3891	POTENTIOMETER,10K(B),REC GAIN ADJ,DECK 2(R-CH)
SVR37	614 226 3952	POTENTIOMETER,100K(B),BIAS ADJ, DECK 2(L-CH)
SVR38	614 226 3952	POTENTIOMETER,100K(B),BIAS ADJ, DECK 2(R-CH)
SVR51	614 226 3853	POTENTIOMETER,2.2K(B),TAPE SPEED ADJ,DECK 1
SVR53	614 226 3853	POTENTIOMETER,2.2K(B),TAPE SPEED ADJ,DECK 2(HIGH)
SVR54	614 226 3853	POTENTIOMETER,2.2K(B),TAPE SPEED ADJ,DECK 2(NORMAL)
X361	614 215 5523	RESONATOR,4.19MHZ

TAPE DECK 1 OPERATION SWITCH P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 237 0063	ASSY,PCB,MECHA SW FOR DECK 1
CN355	614 227 0844	ASSY,CONNECTOR-S,10P,MODE SW FOR DECK 1
D331	408 014 3701	LED SLZ-338A-04-AB-T1,REV
D332	408 014 3701	LED SLZ-338A-04-AB-T1,FWD
D333	407 109 4104	LED SLP-181C-51-B,HI DUB.
D334	407 109 4104	LED SLP-181C-51-B,NOR DUB.
D381	407 012 4406	DIODE 1SS133
D382	407 012 4406	DIODE 1SS133
D383	407 012 4406	DIODE 1SS133
D384	407 012 4406	DIODE 1SS133
D385	407 012 4406	DIODE 1SS133
D386	407 012 4406	DIODE 1SS133
D387	407 012 4406	DIODE 1SS133
D388	407 012 4406	DIODE 1SS133
D389	407 012 4406	DIODE 1SS133
D390	407 012 4406	DIODE 1SS133
S361	614 220 5594	SWITCH,TACT,REW
S362	614 220 5532	SWITCH,TACT,REV
S363	614 220 5532	SWITCH,TACT,STOP
S364	614 220 5532	SWITCH,TACT,FWD
S365	614 220 5594	SWITCH,TACT,FF
S366	614 220 5594	SWITCH,TACT,HI DUB.
S367	614 220 5594	SWITCH,TACT,NOR DUB.

TAPE DECK 2 OPERATION SWITCH P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 237 0070	ASSY,PCB,MECHA SW FOR DECK 2
CN356	614 227 0851	ASSY,CONNECTOR-S,11P,MODE SW FOR DECK 2
D335	408 014 3701	LED SLZ-338A-04-AB-T1,REV
D336	408 014 3701	LED SLZ-338A-04-AB-T1,FWD
D337	407 109 4104	LED SLP-181C-51-B,REC/PAUSE
D371	407 012 4406	DIODE 1SS133
D372	407 012 4406	DIODE 1SS133
D373	407 012 4406	DIODE 1SS133

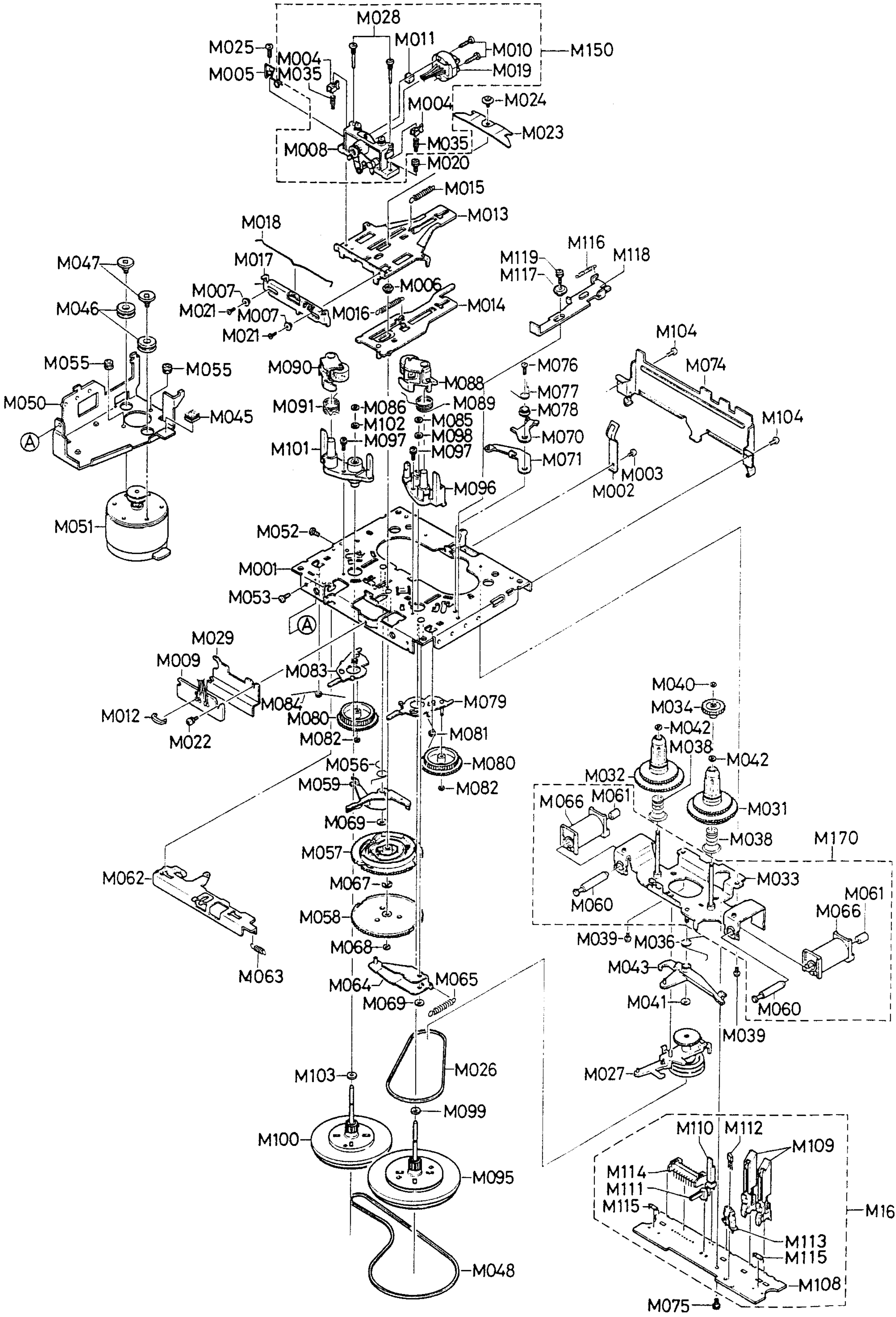
PARTS LIST (TAPE DECK)

REF.NO.	PART NO.	DESCRIPTION
D374	407 012 4406	DIODE 1SS133
D375	407 012 4406	DIODE 1SS133
D376	407 012 4406	DIODE 1SS133
S368	614 220 5594	SWITCH,TACT,REW
S369	614 220 5532	SWITCH,TACT,REV
S370	614 220 5532	SWITCH,TACT,STOP
S371	614 220 5532	SWITCH,TACT,FWD
S372	614 220 5594	SWITCH,TACT,FF
S373	614 220 5594	SWITCH,TACT,REC/PAUSE
S374	614 220 5594	SWITCH,TACT,MUTE

DOLBY·MODE SWITCH P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
74	614 237 0650	ASSY,PCB,MODE DOLBY SW
CN357	614 230 8165	ASSY,CONNECTOR-S,4P,TO MAIN PCB
S375	614 227 2343	SWITCH,SLIDE,DOLBY
S376	614 227 2350	SWITCH,SLIDE,REV MODE

EXPLODED VIEW (TAPE MECHANISM "DECK 1")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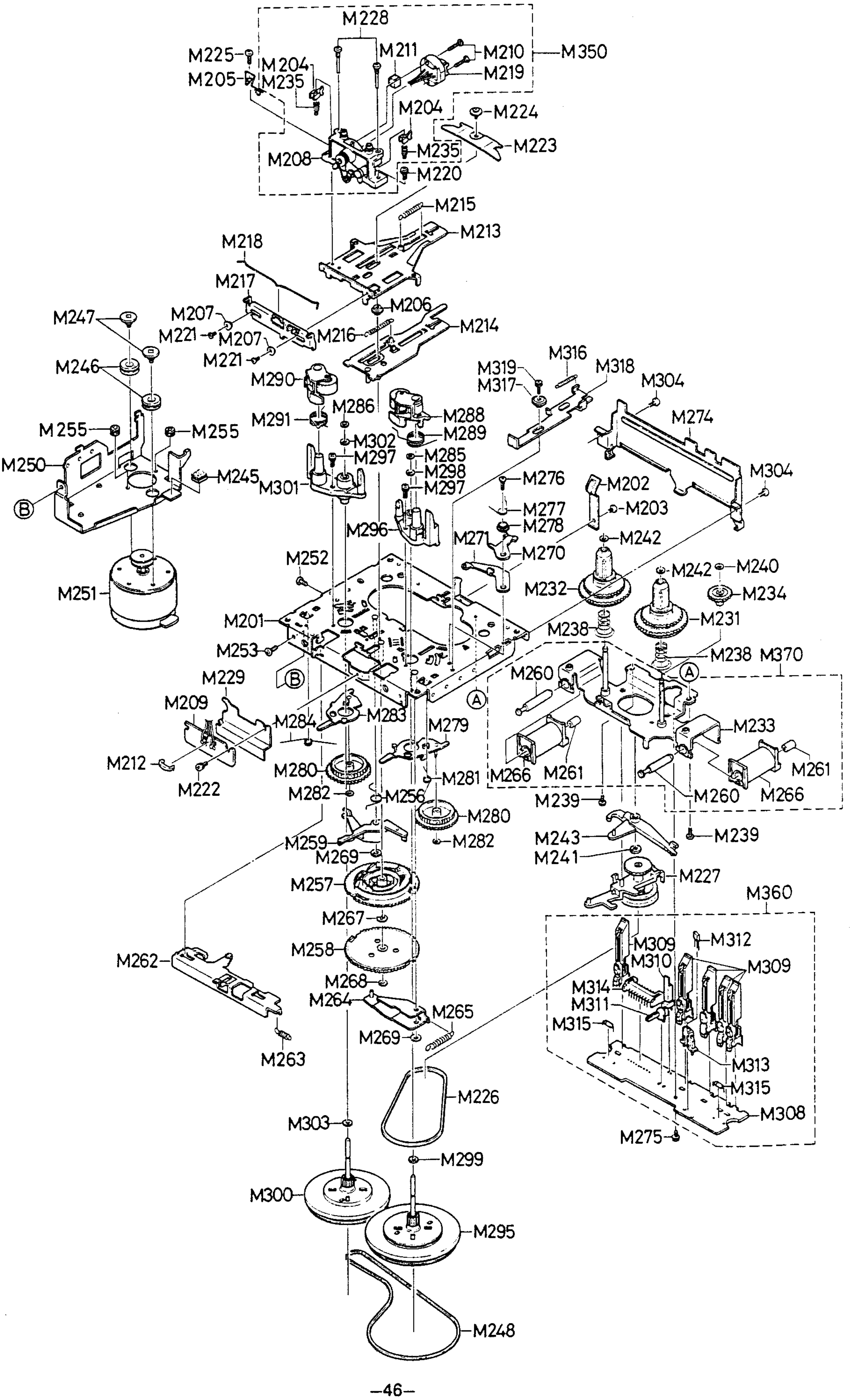
PARTS LIST (TAPE MECHANISM "DECK-1")

DECK-1 MECHANISM (TM-T55PTN)

REF.NO.	PART NO.	DESCRIPTION
M001	614 229 1832	ASSY,CHASSIS
M002	614 229 1405	PLATE,PACK SPRING
M003	412 027 2606	SPECIAL SCREW,C TAPP M2X3
M004	614 212 4451	GUIDE,TAPE
M005	614 229 1481	SPRING,WIRE,CLUMP(V)
M006	614 212 5991	COLLAR,PANEL
M007	614 206 3118	COLLAR,CHP LEVER
M008	614 229 1566	ASSY,BRACKET-E,HEAD BASE
M009	614 206 3408	PCB,RELAY BOARD
M010	412 041 6505	SPECIAL SCREW,HEAD COLLAR
M011	614 206 2937	SPACER,HEAD
M012	614 206 2975	FIXER,WIRE CLAMP
M013	614 206 3248	SLIDE,HEAD PANEL (A)
M014	614 206 2821	ASSY,SLIDE,HEAD PANEL (B)
M015	614 206 3286	SPRING,TENS,RC
M016	614 206 3293	SPRING,TENS,PANEL
M017	614 206 3194	LEVER,CHP
M018	614 214 0970	SPRING,WIRE,PINCH ROLLER
M019	614 227 2169	HEAD,PLAY
M020	412 032 2707	SPECIAL SCREW,TAMS M2X5
M021	412 032 2806	SPECIAL SCREW,M17X3 (FOR CAMERA)
M022	412 032 2509	SPECIAL SCREW,S TAPP TAMS M2X5
M023	614 215 7428	SPRING,PLATE,PANEL
M024	412 032 3001	SPECIAL SCREW,CUPS TAPP M2X5
M025	412 032 4800	SPECIAL SCREW,BIND M2X5
M026	614 206 4849	BELT,FLAT,RF
M027	614 229 1849	ASSY,PULLEY,RF CLUTCH
M028	412 034 0909	SPECIAL SCREW,GUIDE
M029	614 229 1412	PLATE,SHIELD
M031	614 206 4399	ASSY,REEL,T(F)
M032	614 207 2158	ASSY,REEL,T(R)
M033	614 206 4382	ASSY,BRACKET-M,REEL BASE
M034	614 206 4658	GEAR,FF
M035	614 212 4529	SPRING,COMP,GUIDE
M036	614 206 5099	SPRING,WIRE,FR TRIGGER ARM
M038	614 206 3309	SPRING,COMP,B.T(R)
M039	412 026 2003	SPECIAL SCREW,C TAPPING M2X4
M040	412 013 4904	SPECIAL WASHER,P CUT 1.2X3X0.25
M041	412 013 7608	SPECIAL WASHER,P CUT 2.1X5X0.5
M042	412 032 3902	SPECIAL WASHER,HL CUT 1.4X3.2X0.4
M043	614 206 3149	LEVER,RF TRIGGER ARM
M045	614 206 2951	CUSHION,MAT
M046	614 206 2944	CUSHION,RUBBER,MOTOR
M047	412 032 4008	SPECIAL SCREW,MOTOR COLLAR
M048	614 229 1368	BELT,FLAT,MAIN
M050	614 229 1290	BRACKET-M,MOTOR
M051	614 229 1818	ASSY,MOTOR,EG530YD-2BH
M052	412 026 1402	SPACIAL SCREW,C TAPP M2X3
M053	412 043 3601	SPECIAL SCREW,CAMERA M2X3.5
M055	614 229 1320	CUSHION,RUBBER,MOTOR
M056	614 206 3347	SPRING,WIRE,M TRIGGER ARM
M057	614 206 3002	GEAR,M
M058	614 206 3019	GEAR,RF CAM
M059	614 206 3170	LEVER,M TRIGGER ARM
M060	614 206 2906	SHAFT,PLUNGER
M061	614 206 4627	HOLDER,PLUNGER
M062	614 229 1856	ASSY,SLIDE,CH SLIDE LEVER
M063	614 206 3279	SPRING,TENS,CH SLIDE LEVER
M064	614 206 2807	ASSY,LEVER,P KICK
M065	614 215 7404	SPRING,TENS,PK LEVER
M066	614 206 3491	MAGNETIC COIL,SOLENOID
M067	412 032 3100	SPECIAL WASHER,E RING D2.0
M068	412 032 3209	SPECIAL WASHER,HL CUT 1.55X3.5X0.5
M069	412 032 3308	SPECIAL WASHER,HL CUT 2.1X5X0.4
M070	614 229 1382	LEVER,E STOPPER A
M071	614 229 1399	LEVER,E STOPPER B
M074	614 229 1443	SLIDE,SW PROTECTOR
M075	412 032 2509	SPECIAL SCREW,S TAPP TAMS M2X5
M076	412 027 5805	SPECIAL SCREW,CAMERA S TAPP M2X5
M077	614 229 1498	SPRING,WIRE,E STOPPER
M078	614 206 3095	COLLAR,E STOPPER
M079	614 207 2882	ASSY,LEVER,T GEAR ARM (F)
M080	614 229 1344	GEAR,T(A)
M081	614 229 1504	SPRING,WIRE,TG ARM (F)
M082	412 013 4904	SPECIAL WASHER,P CUT 1.2X3X0.25
M083	614 206 4467	ASSY,LEVER,T GEAR ARM (R)
M084	614 229 1511	SPRING,WIRE,TG ARM (R)
M085	412 032 3506	SPECIAL WASHER,NYLON 2.1X3.5X0.5
M086	412 027 9803	SPECIAL WASHER,NYLON 1.8X3.5X0.5
M088	614 212 7469	ASSY,PINCH ROLLER,ARM(F)
M089	614 206 3354	SPRING,WIRE,P ARM (F)
M090	614 212 7476	ASSY,PINCH ROLLER,ARM(R)
M091	614 206 3361	SPRING,WIRE,P ARM (R)
M095	614 234 0226	ASSY,FLYWHEEL,(F)
M096	614 206 2722	ASSY,BRACKET-E,FL METAL(F)
M097	412 032 3605	SPECIAL SCREW,S TAPP M2X6
M098	412 032 3704	SPECIAL WASHER,HL CUT 1.8X4X0.5
M099	412 039 2106	SPECIAL WASHER,HL 2.3X3.8X0.3
M100	614 234 0219	ASSY,FLYWHEEL,(R)
M101	614 214 0888	ASSY,BRACKET-E,FL METAL(R)
M102	412 032 5401	SPECIAL WASHER, HL CUT 1.55X3.5X0.5
M103	412 034 0800	SPECIAL WASHER,HL 2.1X3.5X0.3
M104	412 026 1402	SPECIAL SCREW,C TAPP M2X3
M108	614 229 1528	PCB,MECHANISM
M109	614 206 3538	SWITCH,LEAF,MTS-10250MVJ0
M110	614 224 9246	SWITCH,LEAF,MSW-1699CF
M111	614 224 9253	SWITCH,LEAF,MSW-17944MVD0
M112	409 128 5209	IC LB9051A,HALL
M113	614 206 2968	HOLDER,IC PROTECTOR
M114	614 017 3888	PLUG,9P
M115	407 004 9105	DIODE DSF10C,SOLENOIDE COIL
M116	614 229 1450	SPRING,TENS,E LEVER
M117	614 206 3101	COLLAR,E KICK LEVER
M118	614 229 1429	SLIDE,E SLIDE LEVER
M119	412 032 2509	SPECIAL SCREW,S TAPP TAMS M2X5
M150	614 229 1764	ASSY,HEAD,PLAY,P-HEAD BLOCK, FOR SERVICE
M160	614 229 1771	ASSY,PCB,MECHANISM,FOR SERVICE
M170	614 207 6231	ASSY,BRACKET-M,REEL-BASE, FOR SERVICE

EXPLODED VIEW (TAPE MECHANISM "DECK 2")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PARTS LIST (TAPE MECHANISM "DECK-2")

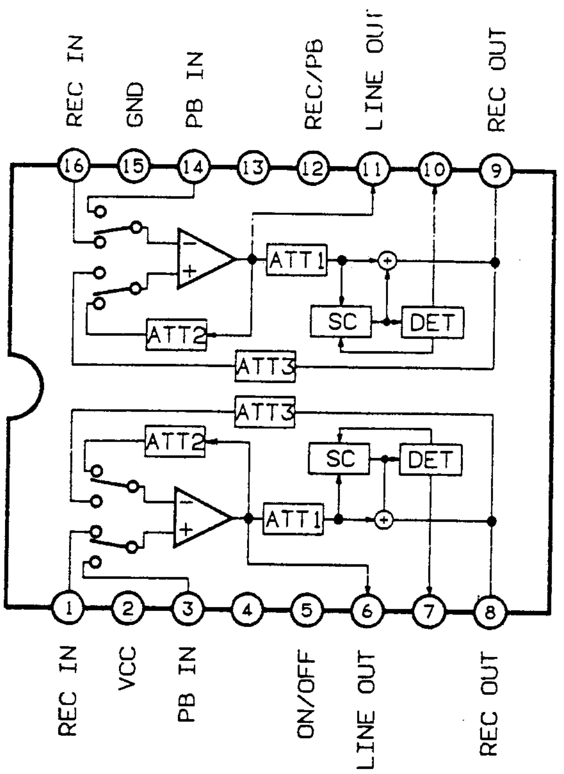
DECK-2 MECHANISM (TM-T55RTN)

REF.NO.	PART NO.	DESCRIPTION
M201	614 229 1832	ASSY,CHASSIS
M202	614 229 1405	PLATE,PACK
M203	412 027 2606	SPECIAL SCREW,C TAPP M2X3
M204	614 212 4451	GUIDE,TAPE
M205	614 229 1481	SPRING,WIRE,CLUMP(V)
M206	614 212 5991	COLLAR,PANEL
M207	614 206 3118	COLLAR,CHP LEVER
M208	614 229 1566	ASSY,BRACKET-E,HEAD BASE
M209	614 206 1954	PCB,RELAY BOARD
M210	412 041 6505	SPECIAL SCREW,HEAD COLLAR
M211	614 206 2937	SPACER,HEAD
M212	614 206 2975	FIXER,WIRE CLAMP
M213	614 206 3248	SLIDE,HEAD PANEL (A)
M214	614 206 2821	ASSY,SLIDE,HEAD PANEL (B)
M215	614 206 3286	SPRING,TENS,RC
M216	614 206 3293	SPRING,TENS,PANEL
M217	614 206 3194	LEVER,CHP
M218	614 214 0970	SPRING,WIRE,PINCH ROLLER
M219	614 227 2152	HEAD,R/P
M220	412 032 2707	SPECIAL SCREW,TAMS M2X5
M221	412 032 2806	SPECIAL SCREW,M1.7X3(FOR CAMERA)
M222	412 032 2509	SPECIAL SCREW,S TAPP TAMS M2X5
M223	614 215 7428	SPRING,PLATE,PANEL
M224	412 032 3001	SPECIAL SCREW,CUPS TAPP M2X5
M225	412 032 4800	SPECIAL SCREW,BIND M2X5
M226	614 206 4849	BELT,FLAT,RF
M227	614 229 1849	ASSY,PULLEY,RF CLUTCH
M228	412 034 0909	SPECIAL SCREW,GUIDE
M229	614 229 1412	PLATE,SHIELD
M231	614 206 4399	ASSY,REEL,T(F)
M232	614 207 2158	ASSY,REEL,T(R)
M233	614 206 4382	ASSY,BRACKET-M,REEL BASE
M234	614 206 4658	GEAR,FF
M235	614 212 4529	SPRING,COMP,GUIDE
M238	614 206 3309	SPRING,COMP,B.T(R)
M239	412 026 2003	SPECIAL SCREW,C TAPPING M2X4
M240	412 013 4904	SPECIAL WASHER,P CUT 1.2X3X0.25
M241	412 013 7608	SPECIAL WASHER,P CUT 2.1X5X0.5
M242	412 032 3902	SPECIAL WASHER, HL CUT 1.4X3.2X0.4
M243	614 206 3149	LEVER,RF TRIGGER ARM
M245	614 206 2951	CUSHION,MAT
M246	614 206 2944	CUSHION,RUBBER,MOTOR
M247	412 032 4008	SPECIAL SCREW,MOTOR COLLAR
M248	614 229 1368	BELT,FLAT,MAIN
M250	614 229 1290	BRACKET-M,MOTOR
M251	614 229 1818	ASSY,MOTOR,EG530YD-2BH
M252	412 026 1402	SPECIAL SCREW,C TAPP M2X3
M253	412 043 3601	SPECIAL SCREW,CAMERA M2X3.5
M255	614 229 1320	CUSHION,RUBBER,MOTOR
M256	614 206 3347	SPRING,WIRE,M TRIGGER ARM
M257	614 206 3002	GEAR,M
M258	614 206 3019	GEAR,RF CAM
M259	614 206 3170	LEVER,M TRIGGER ARM
M260	614 206 2906	SHAFT,PLUNGER
M261	614 206 4627	HOLDER,PLUNGER
M262	614 229 1856	ASSY,SLIDE,CH SLIDE LEVER
M264	614 206 2807	ASSY,LEVER,P KICK
M265	614 215 7404	SPRING,TENS,PK LEVER
M266	614 206 3491	MAGNETIC COIL,SOLENOID
M267	412 032 3100	SPECIAL WASHER,E RING D2.0
M268	412 032 3209	SPECIAL WASHER, HL CUT 1.55X3.5X0.5
M269	412 032 3308	SPECIAL WASHER,HL CUT 2.1X5X0.4
M270	614 229 1382	LEVER,E STOPPER A
M271	614 229 1399	LEVER,E STOPPER B
M274	614 229 1443	SLIDE,SW PROTECTOR
M275	412 032 2509	SPECIAL SCREW,S TAPP TAMS M2X5

REF.NO.	PART NO.	DESCRIPTION
M276	412 027 5805	SPECIAL SCREW,CAMERA TAPP M2X5
M277	614 229 1498	SPRING,WIRE,E STOPPER
M278	614 206 3095	COLLAR,E STOPPER
M279	614 207 2882	ASSY,LEVER,T GEAR ARM (F)
M280	614 229 1344	GEAR,T(A)
M281	614 229 1504	SPRING,WIRE,TG ARM (F)
M282	412 013 4904	SPECIAL WASHER,P CUT 1.2X3X0.25
M283	614 206 4467	ASSY,LEVER,T GEAR ARM (R)
M284	614 229 1511	SPRING,WIRE,TG ARM (R)
M285	412 032 3506	SPECIAL WASHER,NYLON 2.1X3.5X0.5
M286	412 027 9803	SPECIAL WASHER,NYLON 1.8X3.5X0.5
M288	614 212 7469	ASSY,PINCH ROLLER,ARM(F)
M289	614 206 3354	SPRING,WIRE,P ARM (F)
M290	614 212 7476	ASSY,PINCH ROLLER,ARM(R)
M291	614 206 3361	SPRING,WIRE,P ARM (R)
M295	614 234 0226	ASSY,FLYWHEEL,(F)
M296	614 206 2722	ASSY,BRACKET-E,FL METAL(F)
M297	412 032 3605	SPECIAL SCREW,S TAPP M2X6
M298	412 032 3704	SPECIAL WASHER,HL CUT 1.8X4X0.5
M299	412 039 2106	SPECIAL WASHER,HL 2.3X3.8X0.3
M300	614 234 0219	ASSY,FLYWHEEL,(R)
M301	614 214 0888	ASSY,BRACKET-E,FL METAL(R)
M302	412 032 5401	SPECIAL WASHER, HL CUT 1.55X3.5X0.5
M303	412 034 0800	SPECIAL WASHER,HL 2.1X3.5X0.3
M304	412 206 1402	SPECIAL SCREW,C TAPP M2X3
M308	614 229 1528	PCB,MECHANISM
M309	614 206 3538	SWITCH,LEAF,MSW-10250MV.TO
M310	614 224 9246	SWITCH,LEAF,MSW-1699CF
M311	614 224 9253	SWITCH,LEAF,MSW-17944MVDO
M312	409 128 5209	IC LB9051A,HALL
M313	314 206 2968	HOLDER,IC PROTECTOR
M314	614 017 3918	PLUG,9P
M315	407 004 9105	DIODE DSF10C,SOLENOID COIL
M316	614 229 1450	SPRING,TENS,E LEVER
M317	614 206 3101	COLLAR,E KICK LEVER
M318	614 229 1429	SLIDE,E SLIDE LEVER
M319	412 032 2509	SPECIAL SCREW,S TAPP TAMS M2X5
M350	614 229 1955	ASSY,HEAD,R/P,R/P-HEAD BLOCK, FOR SERVICE
M360	614 233 9961	ASSY,PCB,MECHANISM,FOR SERVICE
M370	614 207 6231	ASSY,BRACKET-M,REEL-BASE, FOR SERVICE

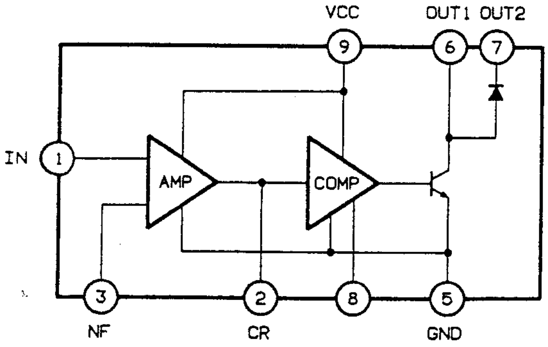
IC BLOCK DIAGRAM (TAPE DECK)

IC351 CXA1100P (Dolby-B Noise Reduction System)

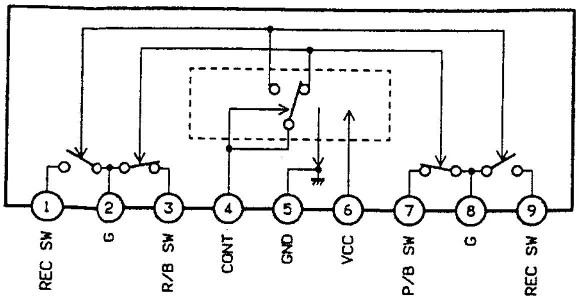

REC IN
GND
PB IN
REC/PB
LINE OUT
REC OUT
16
15
14
13
12
11
10
9
ATT1
ATT2
ATT3
SC
DET
1
2
3
4
5
6
7
8
REC IN
VCC
PB IN
ON/OFF
LINE OUT
REC OUT

ATT : ATTENUATOR
SC : SIDE CHAIN
DET : DETECTOR

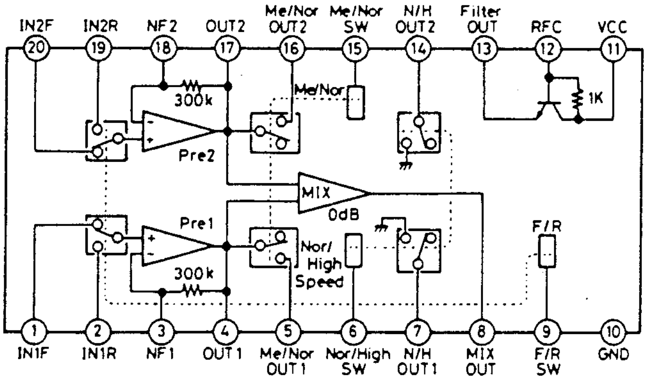
IC362 LA2000 (Audio Level Sensor)


VCC
OUT1
OUT2
9
6
7
IN
1
AMP
COMP
3
2
8
5
NF
CR
GND

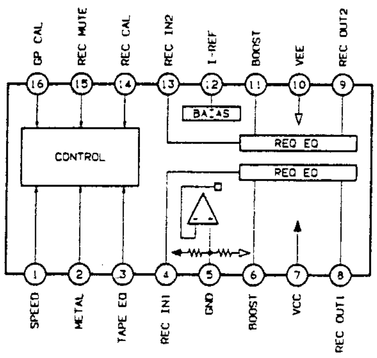
IC363 BA3126N (2-ch Head Switch for Radio Cassette)


1
2
3
4
5
6
7
8
9
REC SW
G
R/B SW
CONT
GND
VCC
P/B SW
G
REC SW

IC371 LA3246 (Pre-Amplifier Electrical SW)


IN2F
IN2R
NF2
OUT2
Me/Nor OUT2
Me/Nor SW
N/H OUT2
Filter OUT
RFC
VCC
20
19
18
17
16
15
14
13
12
11
300k
Me/Nor
1K
Pre2
MIX
0dB
Pre1
Nor/ High Speed
F/R
300k
1
2
3
4
5
6
7
8
9
10
IN1F
IN1R
NF1
OUT1
Me/Nor OUT1
Nor/High SW
N/H OUT1
MIX OUT
F/R SW
GND

IC372 CXA1398P (Record Equalizer. Amplifier for Stereo Cassette recorder)

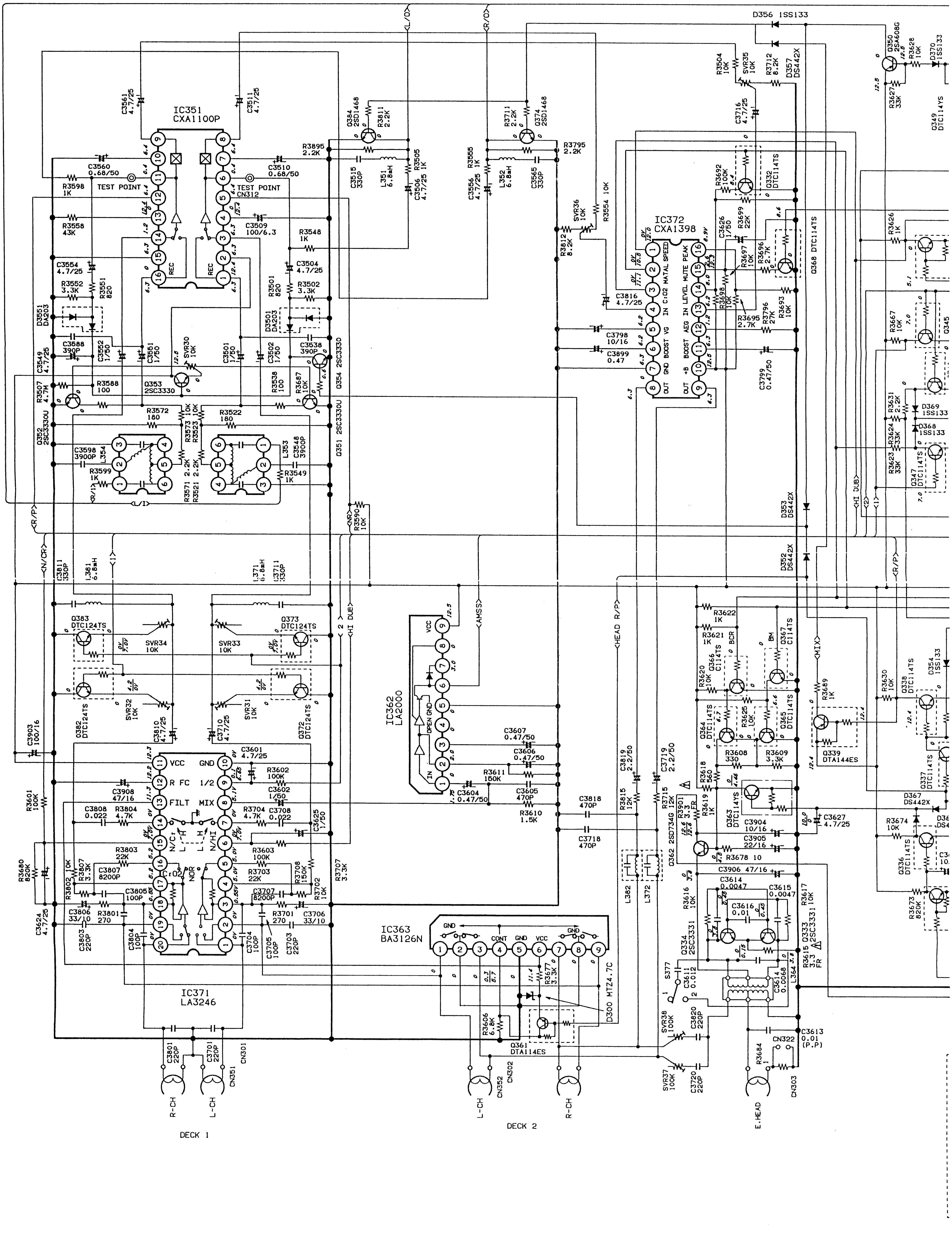

GP CAL
REC MUTE
REC CAL
REC IN2
I-REF
BOOST
VEE
REC OUT2
16
15
14
13
12
11
10
9
BAIAS
CONTROL
REQ EQ
REQ EQ
1
2
3
4
5
6
7
8
SPEED
METAL
TAPE EQ
REC IN1
GND
BOOST
VCC
REC OUT1

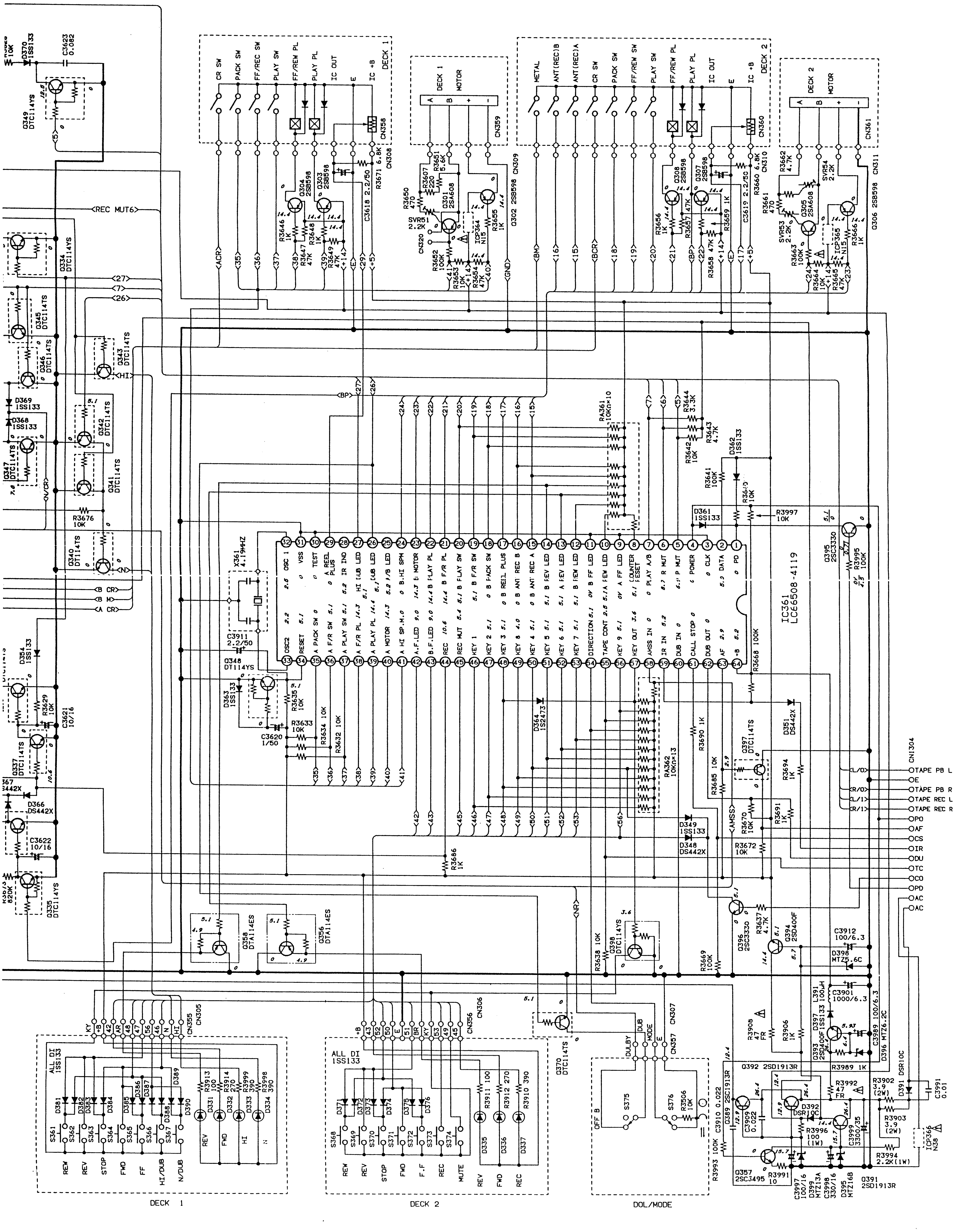
IC BLOCK DIAGRAM (TAPE DECK)

IC361 LC66508-4119(Micro Processor)

No.	NAME	DESCRIPTION	LOW	HIGH	I/O
1	PDOWN	Power Down	ON		I
2	DATA	Connect to +5v through the resistor, 10k ohm.			
3	CLK	Ground			
4	POWER	Connect to +5v through the resistor, 10k ohm.			
5	PMUTE	Play Mute control	OFF	ON	O
6	RMUTE	Record Mute control	OFF	ON	O
7	PLAY A/B	A Mechanism, B Mechanism Play signal control	PLAY A	PLAY B	O
8	AMS IN	AMS signal input	non signal	signal	I
9	A-FF LED	Ground			
10	A-RWD LED	Connect to +5v through the resistor, 10k ohm.			
11	B-FF LED	Ground			
12	B-RWD LED	Connect to +5v through the resistor, 10k ohm.			
13	A-REV LED	A Mechanism Reverse LED	ON		O
14	B-REV LED	B Mechanism Reverse LED	ON		O
15	A-ANTREC	A Anti-Record switch for B Mechanism Forward	REC	ANT REC	I
16	B-ANTREC	B Anti-Record switch for B Mechanism Reverse	REC	ANT REC	I
17	B-REEL	B Mechanism Reel Pulse			I
18	B-PACK SW	Detecting terminal for Cassette in B Mechanism	being	not	I
19	B-FF/RWD SW	Detecting terminal for FF, RWD mode in B Mechanism	FF	RWD	I
20	B-PLAY SW	Detecting terminal for Play mode in B Mechanism	PLAY		I
21	B-P2	B Mechanism FF, RWD Plunger control	ON		O
22	B-P1	B Mechanism Play Plunger control	ON		O
23	B-MOTOR	B Mechanism Motor switching	ON		O
24	B-HIGH	B Mechanism Motor speed switching	LOW	HIGH	O
25	A/B LED	Open			
26	DUB LED	Normal speed Dubbing LED	ON		O
27	HDUB	High speed Dubbing LED	ON		O
28	IRIND	Open			
29	A-REEL	A Mechanism Reel Pulse			I
30	TEST	Ground			
31	VSS	Ground			
32	OSC1	Pin for connection to 4.19MHz Oscillation			I
33	OSC2	Pin for connection to 4.19MHz Oscillation			O
34	RESET	Input terminal of system Reset			I
35	A-PACK SW	Detecting terminal for Cassette in A Mechanism	being	not	I
36	A-FF/RWD SW	Detecting terminal for FF, RWD mode in A Mechanism	FF	RWD	I
37	A-PLAY SW	Detecting terminal for Play mode in A Mechanism	PLAY		I
38	A-P2	A Mechanism FF, RWD Plunger control	ON		O
39	A-P1	A Mechanism Play Plunger control	ON		O
40	A-MOTOR	A Mechanism Motor switching	ON		O
41	A-HIGH	A Mechanism Motor speed switching	LOW	HIGH	O
42	A-FOW LED	A Mechanism Forward LED	ON		O
43	B-FOW LED	B Mechanism Forward LED	ON		O
44	REC LED	B Mechanism Record LED	ON		O
45	MUTE LED	B Mechanism Record Mute LED	ON		O
46	KEY1	Key 1 : FPLAY (A Forward Play)			I
47	KEY2	Key 1 : RPLAY (A Reverse Play)			I
48	KEY3	Key 1·2 : STOP (A Stop) Key 1·3 : FF (A Fast Forward) Key 2·3 : REW (A Rewind)			I
49	KEY8	Key 5·6 : REW (B Rewind) Key 7 : REC (A Record) Key 8 : MUTE (A Record Mute)			I
50	KEY4	Key 4 : FPLAY (B Forward Play)			I
51	KEY5	Key 5 : RPLAY (B Reverse Play)			I
52	KEY6	Key 4·5 : STOP (B Stop)			I
53	KEY7	Key 4·6 : FF (B Fast Forward)			I
54	DIR	Direction switch Low : ⇆, Mid : ⊃, Hi : ⊂⊃			I
55	TIMER	Timer standby switch Low : PLAY, Mid : OFF, Hi : REC			I
56	KEY9	Key 1·9 : DUB (Normal speed) Key 3·9 : HDUB (High speed) Key 4·9 : CDUB (Normal speed CD) Key 6·9 : HCDUB (High speed CD)			I
57	KEYOUT	Switching to segment diodes & KEYIN			O
58	RESET	Counter Reset switch			
59	IRIN	Remocon data signal			I
60	DUBIN	Dubbing control input			I
61	CSTOP	Call Stop input			I
62	DUBOUT	Dubbing control output			O
63	AF	Auto Function control			O
64	VDD	Power Source			

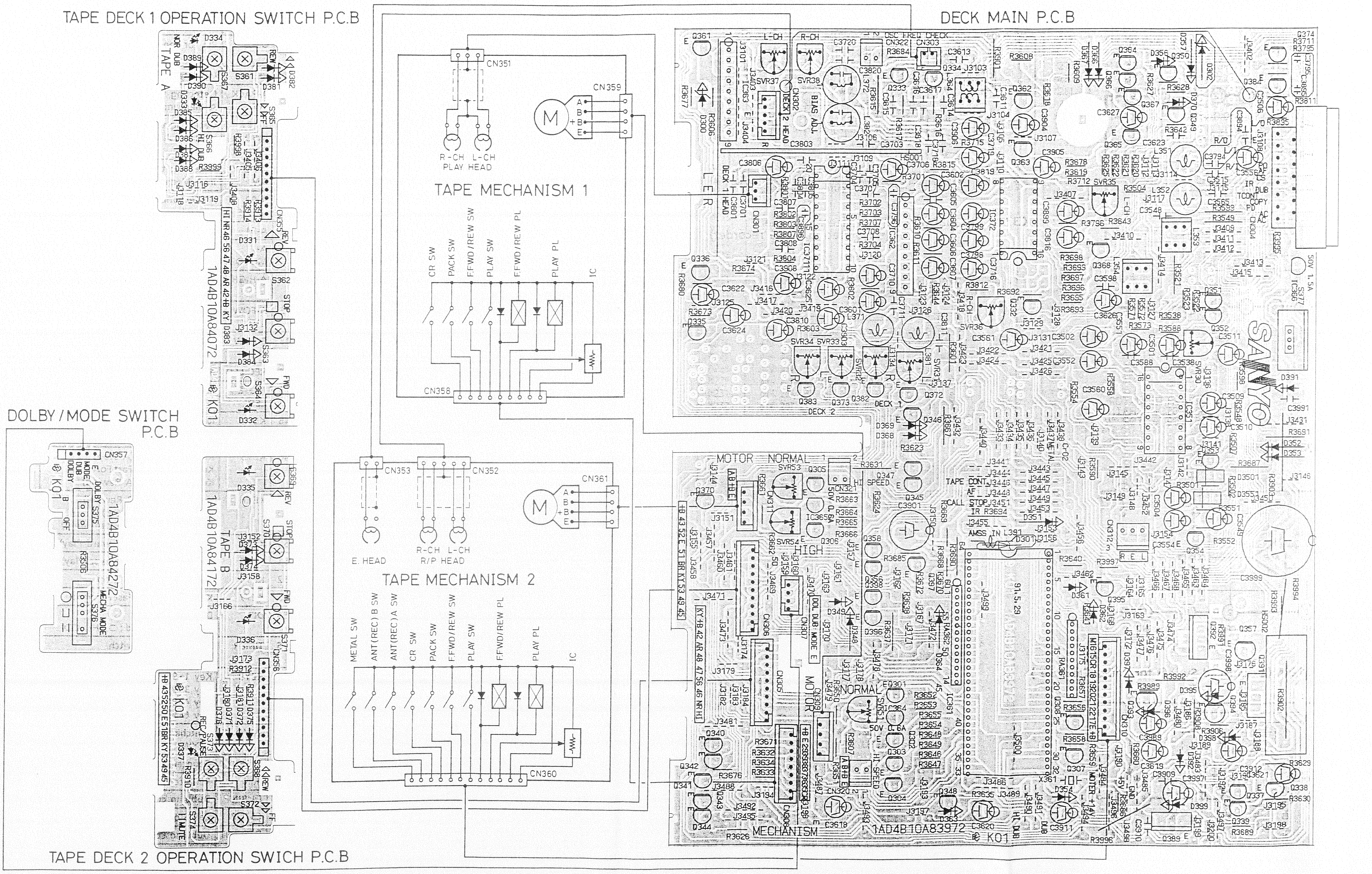
SCHEMATIC DIAGRAM (DECK)


IC351
CXA1100P
TEST POINT
TEST POINT
CN312
REC
REC
IC372
CXA1398
IN C:02 MATAL SPEED
GND BOOST VG
OUT
OUT +B BOOST AEG IN LEVEL MUTE PEAK
IC362
LA2000
VCC
OPEN GND
IN
IC371
LA3246
VCC
GND
R FC
1/2
FILT
MIX
N/C
N/HI
CrO2
NOR
IC363
BA3126N
GND
CONT
GND
VCC
GND
D356 1SS133
D357 DS442X
D353 DS442X
D352 DS442X
Q350 2SA608G
Q349 DTC114YS
Q332 DTC114TS
Q368 DTC114TS
Q345
Q347 DTC114TS
D370 1SS133
D369 1SS133
D368 1SS133
Q384 2SD1468
Q374 2SD1468
Q353 2SC3330
Q354 2SC3330
Q352 2SC3330U
Q351 2SC3330U
Q383 DTC124TS
Q373 DTC124TS
Q382 DTC124TS
Q372 DTC124TS
Q366 C114TS
Q367 C114TS
Q364 DTC114TS
Q365 DTC114TS
Q363 DTC114YS
Q339 DTA144ES
Q338 DTC114TS
Q337 DTC114TS
Q336 DTC114TS
D354 1SS133
D367 DS442X
Q362 2SD734G
Q334 2SC3331
Q333 2SC3331
Q361 DTA114ES
D300 MTZ4.7C
BCR
BM
L351 6.8mH
L352 6.8mH
L354
L353
L381 6.8mH
L371 6.8mH
L382
L372
L364
<L/O>
<R/O>
<R/P>
<L/I>
<R/I>
<NR>
<N/CR>
<1>
<2>
<HI DUB>
<AMS>
<HEAD R/P>
<MIX>
S377
CN351
CN301
CN352
CN302
CN322 (P.P)
CN303
R-CH
L-CH
DECK 1
L-CH
R-CH
DECK 2
E.HEAD
C3561 4.7/25
C3511 4.7/25
C3560 0.68/50
C3510 0.68/50
R3598 1K
R3558 43K
C3509 100/6.3
R3548 1K
C3554 4.7/25
R3552 3.3K
R3551 820
C3504 4.7/25
R3502 3.3K
R3501 820
D351 DA203
D3501 DA203
C3688 390P
C3638 390P
C3549 4.7/25
C3552 1/50
C3551 1/50
SVR30 10K
C3501 1/50
C3502 1/50
R3507 4.7M
R3588 100
R3538 100
R3687 10K
R3572 180
R3573 10K
R3523 10K
R3522 180
C3598 3900P
C3548 3900P
R3599 1K
R3549 1K
R3571 2.2K
R3521 2.2K
R3590 10K
R3811 2.2K
R3711 2.2K
R3895 2.2K
R3795 2.2K
C3515 330P
R3505 1K
C3506 4.7/25
C3556 4.7/25
R3555 1K
C3565 330P
SVR36 10K
R3554 10K
R3812 8.2K
R3504 10K
SVR35 10K
R3712 8.2K
C3716 4.7/25
R3627 33K
R3628 10K
R3692 100K
C3626 1/50
R3699 22K
R3697 10K
R3696 2.7K
R3698 10K
R3695 2.7K
R3796 27K
R3693 10K
C3816 4.7/25
C3798 10/16
C3899 0.47
C3799 0.47/50
R3626 1K
R3667 10K
R3631 2.2K
R3624 33K
R3623 33K
C3811 330P
C3711 330P
SVR34 10K
SVR33 10K
SVR32 10K
SVR31 10K
C3810 4.7/25
C3710 4.7/25
C3903 100/16
C3601 4.7/25
R3602 100K
C3602 1/60
C3908 47/16
R3601 100K
C3808 0.022
R3804 4.7K
R3704 4.7K
C3708 0.022
C3625 1/50
R3803 22K
R3603 100K
R3807 3.3K
C3807 8200P
R3703 22K
R3708 150K
R3702 10K
R3707 3.3K
R3680 820K
R3802 10K
C3805 100P
C3707 8200P
C3806 33/10
R3801 270
R3701 270
C3706 33/10
C3624 4.7/25
C3803 220P
C3804 100P
C3704 100P
C3705 100P
C3703 220P
C3607 0.47/50
C3606 0.47/50
R3611 150K
C3604 0.47/50
C3605 470P
R3610 1.5K
C3818 470P
C3718 470P
C3819 2.2/50
C3719 2.2/50
R3815 12K
R3715 12K
R3901 3.3 FR
R3622 1K
R3621 1K
R3620 10K
R3625 10K
R3689 1K
R3630 10K
R3618 560
R3608 330
R3609 3.3K
R3619 1K
C3904 10/16
C3905 22/16
R3678 10
C3627 4.7/25
R3674 10K
C3906 47/16
C3614 0.0047
C3615 0.0047
R3616 10K
C3616 0.01
R3617 10K
R3673 820K
R3615 3.3 FR
C3611 0.012
C3614 0.0068
R3677 3.3K
R3606 6.8K
SVR38 100K
C3820 220P
SVR37 100K
C3720 220P
C3613 0.01
R3684 1
C3801 220P
C3701 220P



IC361
LC66508-4119
X361
4.19MHZ
C3911
2.2/50
Q348
DT114YS
D363
1SS133
R3635
10K
R3633
10K
C3620
1/50
R3634 10K
R3632 10K
RA361
10K×10
RA362
10K×13
D364
1S2473
OSC 1
VSS
TEST
A REEL PLUS
IR IND
HI DUB LED
DUB LED
A/B LED
B.HI SPM
B MOTOR
B PLAY PL
B F/R PL
B PLAY SW
B F/R SW
B PACK SW
B REEL PLUS
B ANT REC B
B ANT REC A
B REV LED
A REV LED
B FEW LED
B FF LED
A FEW LED
A FF LED
COUNTER RESET
PLAY A/B
R MUT
P MUT
POWER
CLK
DATA
PD
OSC2
RESET
A PACK SW
A F/R SW
A PLAY SW
A F/R PL
A PLAY PL
A MOTOR
A HI SP.M
A.F.LED
B.F.LED
REC
REC MUT
KEY 1
KEY 2
KEY 3
KEY 4
KEY 5
KEY 6
KEY 7
DIRECTION
TAPE CONT
KEY OUT
AMSS IN
IR IN
DUB IN
CALL STOP
DUB OUT
AF
+B
CR SW
PACK SW
FF/REC SW
PLAY SW
FF/REW PL
PLAY PL
IC OUT
E
IC +B
DECK 1
CN358
CN308
R3671 6.8K
C3618 2.2/50
Q304
2SB598
Q303
2SB598
R3646
1K
R3647
47K
R3648
1K
R3649
47K
DECK 1
MOTOR
CN359
CN320
SVR51
2.2K
R3650
470
R3607
220
R3651
5.6K
Q301
2SA608
ICP364
N15
R3655
1K
Q302 2SB598
CN309
R3652
100K
R3653
10K
R3654
47K
METAL
ANT(REC)B
ANT(REC)A
CR SW
PACK SW
FF/REW SW
PLAY SW
FF/REW PL
PLAY PL
IC OUT
E
IC +B
DECK 2
CN360
CN310
R3660 6.8K
C3619 2.2/50
Q308
2SB598
Q307
2SB598
R3656
1K
R3657
47K
R3658 47K
R3659 1K
DECK 2
MOTOR
CN361
CN311
R3662
4.7K
SVR54
2.2K
R3661
470
Q305
2SA608
SVR53
2.2K
R3663
100K
R3664
10K
R3665
47K
ICP365
N15
R3666
1K
Q306 2SB598
R3644
3.3K
R3643
4.7K
R3642
10K
D362
1SS133
R3641
100K
R3645
10K
D361
1SS133
R3997
10K
Q395
2SC3330
R3995
100K
R3668 100K
R3690 1K
Q397
DTC114TS
D351
DS442X
R3694
1K
R3685 10K
D349
1SS133
D348
DS442X
R3670
1K
R3691
1K
R3672
10K
R3686
1K
CN1304
TAPE PB L
E
TAPE PB R
TAPE REC L
TAPE REC R
PO
AF
CS
IR
DU
TC
CO
PD
AC
AC
Q396
2SC3330
R3637
4.7K
Q394
2SD400F
C3912
100/6.3
D398
MTZ5.6C
R3669
100K
R3638 10K
Q398
DTC114YS
Q358
DTA114ES
Q356
DTA114ES
Q370
DTC114TS
C3901
1000/6.3
L391
100μH
D397
DSR10C
Q393
2SD400F
C3989 100/6.3
D396 MTZ6.2C
R3908
47
FR
R3906
1K
R3989 1K
Q392 2SD1913R
R3992
47
FR
R3902
3.9
(2W)
D391
DSR10C
C3991
0.01
R3903
3.9
(2W)
ICP366
N38
R3994
2.2K(1W)
Q391
2SD1913R
C3910 0.022
Q389 2SC1913R
C3909
0.022
D392
DSR10C
R3996
100
(1W)
C3999
330/35
R3993 100K
Q357
2SC3495
R3991
10
C3997
100/16
D399
MTZ13A
C3998
330/16
D395
MTZ16B
Q349
DTC114YS
D370
1SS133
C3623
0.082
REC MUT6
Q334
DTC114YS
Q345
DTC114TS
Q346
DTC114TS
Q343
DTC114TS
D369
1SS133
D368
1SS133
Q347
DTC114TS
Q342
DTC114TS
Q341
DTC114TS
R3676
10K
Q340
DTC114TS
B CR
B M
A CR
D354
1SS133
R3629
10K
C3621
10/16
Q337
DTC114TS
D367
DS442X
D366
DS442X
C3622
10/16
Q335
DTC114YS
CN305
CN355
KY
+B
42
AR
48
47
56
46
N
HI
ALL DI
1SS133
D381
D382
D383
D384
D385
D386
D387
D388
D389
D390
S361
S362
S363
S364
S365
S366
S367
REW
REV
STOP
FWD
FF
HI/DUB
N/DUB
R3913
100
R3914
270
R3999
390
R3998
390
D331
D332
D333
D334
REV
FWD
HI
N
DECK 1
CN306
CN356
+B
43
52
50
E
51
BR
KY
53
49
45
ALL DI
1SS133
D371
D372
D373
D374
D375
D376
S368
S369
S370
S371
S372
S373
S374
REW
REV
STOP
FWD
F.F
REC
MUTE
R3911 100
R3912 270
R3910 390
D335
D336
D337
REV
FWD
REC
DECK 2
CN307
CN357
DOLBY
DUB
MODE
E
OFF B
S375
S376
R3506
10K
DOL/MODE

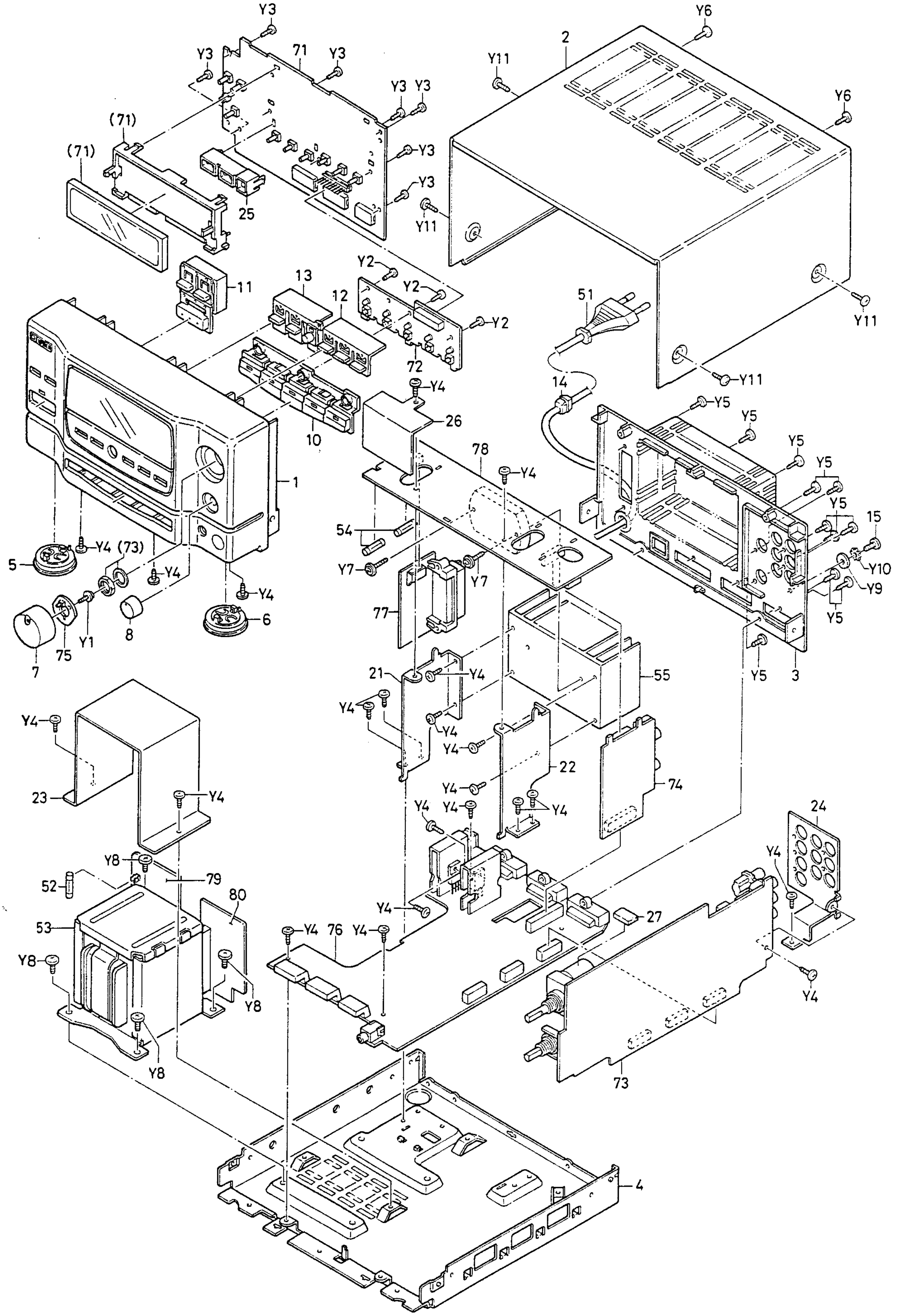
WIRING DIAGRAM (TAPE DECK)



TAPE DECK 1 OPERATION SWITCH P.C.B
DECK MAIN P.C.B
DOLBY / MODE SWITCH P.C.B
TAPE DECK 2 OPERATION SWICH P.C.B
TAPE MECHANISM 1
TAPE MECHANISM 2
CN351
CN352
CN353
CN355
CN356
CN357
CN358
CN359
CN360
CN361
M
A
B
+B
E
R-CH L-CH PLAY HEAD
R-CH L-CH R/P HEAD
E. HEAD
CR SW
PACK SW
F.FWD/REW SW
PLAY SW
F.FWD/REW PL
PLAY PL
IC
METAL SW
ANT(REC) B SW
ANT(REC) A SW
TAPE A
TAPE B
NOR DUB
HI DUB
REW
FF
FWD
REV
STOP
REC/PAUSE
MUTE
MODE
DUB
DOLBY
OFF
MECHA MODE
1AD4B10A84072
1AD4B10A84172
1AD4B10A84272
1AD4B10A83972
K01
L-CH
R-CH
OSC FREQ CHECK
BIAS ADJ.
DECK 1 HEAD
DECK 2 HEAD
DECK 1
DECK 2
MOTOR NORMAL
HI SPEED
HIGH
NORMAL
MOTOR
MECHANISM
TAPE CONT
CALL
STOP
IR
AMSS IN
DOL DUB MODE E
50V 1.5A
50V 0.6A
91.5.29
SANYO

AMPLIFIER UNIT (CA-G5)

EXPLODED VIEW (AMPLIFIER)


Y3
71
Y3
Y3
Y3
Y3
Y3
Y3
(71)
(71)
25
Y11
Y6
2
Y11
Y6
Y11
Y11
11
13
12
Y2
Y2
Y2
72
51
10
Y4
26
78
14
Y5
Y5
Y5
Y5
Y5
15
Y10
Y9
Y5
1
Y4
54
Y7
Y7
77
5
Y4
(73)
Y4
Y4
6
7
75
Y1
8
21
Y4
Y4
Y4
55
Y5
3
Y4
23
Y4
Y4
22
Y4
Y4
Y4
74
Y4
Y4
24
Y8
79
52
80
27
53
Y4
76
Y4
Y4
Y8
Y8
Y8
73
Y4
4

PARTS LIST (AMPLIFIER)

CABINET & CHASSIS (CA-G5)

REF.NO.	PART NO.	DESCRIPTION
1	614 236 1177	ASSY,PANEL,FRONT(B)
	614 236 1160	ASSY,PANEL,FRONT(W)
2	614 236 1108	ASSY,CABINET(W)
	614 232 0129	ASSY,CABINET(B)
3	614 236 1207	ASSY,PANEL,REAR
4	614 227 8727	ASSY,CABINET,BOTTOM
5	614 234 7218	ASSY,FOOT,FRONT-L
6	614 234 7225	ASSY,FOOT,FRONT-R
7	614 236 1016	KNOB,ROTARY,VOLUME(B)
	614 236 1580	KNOB,ROTARY,VOLUME(W)
8	614 236 1023	KNOB,ROTARY,BALANCE(B)
	614 236 1597	KNOB,ROTARY,BALANCE(W)
10	614 236 1214	ASSY,BUTTON,FUNCTION(W)
	614 229 2815	ASSY,BUTTON,FUNCTION(B)
11	614 227 1599	BUTTON,POWER(B)
	614 236 1641	BUTTON,POWER(W)
12	614 236 1658	BUTTON,G.EQUALIZER(W)
	614 227 1605	BUTTON,G.EQUALIZER(B)
13	614 227 1612	BUTTON,SOUND ON/OFF
14	614 129 1772	FIXER,AC CORD
15	412 003 2804	SPECIAL SCREW,PHONO EARTH
21	614 227 1766	BRACKET-E,HEATSINK,L
22	614 227 1773	BRACKET-E,HEATSINK,R
23	614 229 0842	SHIELD,P.T
24	614 227 2008	SHIELD,TERMINAL(RCA)
25	614 227 2015	REFLECTOR,SOUND P. LED
26	614 232 7197	COVER,MAIN-AMP PCB
27	614 125 6443	CUSHION,WIRE FIX
	614 129 4971	FIXER,WIRE FIX

FIXING PARTS (CA-G5)

REF.NO.	PART NO.	DESCRIPTION
Y1	411 024 3807	SCR S-TPG PAN+FLG 2X8
Y2	411 021 3107	SCR S-TPG BIN 2.6X8
Y3	411 021 1806	SCR S-TPG BIN 2.6X10
Y4	411 021 6405	SCR S-TPG BIN 3X8
Y5	411 021 3503	SCR S-TPG BIN 3X10
Y6	411 021 3701	SCR S-TPG BIN 3X10(B)
	411 021 3404	SCR S-TPG BIN 3X10(W)
Y7	411 020 9407	SCR S-TPG BRZ+FLG 3X14
Y8	411 001 4209	SCR S-TPG BIN 4X8
Y9	411 105 9704	WASHER Z 3X10X1
Y10	411 008 0402	WASHER OUT TW 3
Y11	411 021 5903	SCR S-TPG BIN 3X6(B)
	411 098 1006	SCR S-TPG BIN 3X6(W)

ELECTRICAL PARTS (CA-G5)

REF.NO.	PART NO.	DESCRIPTION
51	⚠614 023 3100	POWER CORD,AC
OR	⚠614 203 0493	POWER CORD,AC
52	⚠423 005 6509	FUSE 250V 1.25A,F4900
53	⚠614 232 8545	POWER TRANSFORMER,PT400
54	⚠423 016 8004	FUSE 250V 3.15A,F4700·4800
55	614 226 8193	HEAT SINK,FOR IC403

AMP FRONT P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 234 2220	ASSY,PCB,FL SPEANA
	614 227 1858	MOUNT-E,FL TUBE GUIDE
	614 226 7943	FLUORESCENT TUBE,SPEANA
CN410	614 226 9954	PLUG,8P,TO MICON PCB
CN411	614 226 9978	PLUG,10P,TO MICON PCB
CN412	614 226 9978	PLUG,10P,TO MICON PCB
CN413	614 229 0392	PLUG,13P,TO FUNC SW PCB
D4005	407 012 4406	DIODE 1SS133
D4006	407 012 4406	DIODE 1SS133
D4007	407 012 4406	DIODE 1SS133
D4008	407 012 4406	DIODE 1SS133
D4009	407 012 4406	DIODE 1SS133
D4010	407 012 4406	DIODE 1SS133
D4011	407 012 4406	DIODE 1SS133
D4012	407 012 4406	DIODE 1SS133
D4413	407 012 4406	DIODE 1SS133
D4414	407 012 4406	DIODE 1SS133
D4908	407 053 6308	ZENER DIODE MTZ5.1B
D4909	408 015 0709	LED SLZ-382F-45-AB-T1,SOUND ON/OFF
D4910	408 014 3800	LED SLZ-382F-03-AB-T1,SURROUND
D4911	408 014 3800	LED SLZ-382F-03-AB-T1,SURROUND
D4912	408 014 3800	LED SLZ-382F-03-AB-T1, DYNAMIC BASS
D4913	408 014 3800	LED SLZ-382F-03-AB-T1, DYNAMIC BASS
D4914	407 107 2706	DIODE DAN803
D4916	408 014 4302	LED SLZ-151B-06-AB-T2,POWER
IC400	409 235 2603	IC XRA14741
IC401	409 235 2603	IC XRA14741
IC402	409 112 9206	IC LC7565A
Q4403	405 000 3400	TR DTC114TS
Q4404	405 000 3400	TR DTC114TS
RA401	614 209 3696	RESISTOR 100K X8
OR	614 218 0464	RESISTOR 100K X8
RA402	614 209 3719	RESISTOR 100K X9
OR	614 218 0471	RESISTOR 100K X9
RA403	614 218 0518	RESISTOR 100K X13
OR	614 209 3795	RESISTOR 100K X13
S4906	614 220 5655	SWITCH,TACT,G.EQ UP
S4907	614 220 5655	SWITCH,TACT,FREQ/MEMO
S4908	614 220 5655	SWITCH,TACT,G.EQ DOWN
S4909	614 220 5655	SWITCH,TACT,SOUND ON/OFF
S4910	614 220 5655	SWITCH,TACT,SURROUND
S4911	614 220 5655	SWITCH,TACT,DYNAMIC BASS
S4912	614 220 5655	SWITCH,TACT,PROGRAMED
S4913	614 220 5655	SWITCH,TACT,PRESET
S4914	614 220 5655	SWITCH,TACT,POWER

FUNCTION SWITCH P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 234 2237	ASSY,PCB,FUNC SW
CN409	614 221 9133	SOCKET,13P,TO FRONT PCB
D4903	407 036 9203	LED SLP-138C-51-B,TAPE
D4904	407 036 9203	LED SLP-138C-51-B,TUNER
D4905	407 036 9203	LED SLP-138C-51-B,CD
D4906	407 036 9203	LED SLP-138C-51-B,PHONO
D4907	407 036 9203	LED SLP-138C-51-B,AV
S4901	614 220 5631	SWITCH,TACT,TAPE
S4902	614 220 5631	SWITCH,TACT,TUNER
S4903	614 220 5631	SWITCH,TACT,CD
S4904	614 220 5631	SWITCH,TACT,PHONO
S4905	614 220 5631	SWITCH,TACT,AV

PRE-AMPLIFIER P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 234 2251	ASSY,PCB,FUNCTION
C4507	403 062 6209	POLYESTER 0.056U J 50V
C4509	403 057 1905	POLYESTER 0.1U J 50V

PARTS LIST (AMPLIFIER)

REF.NO.	PART NO.	DESCRIPTION
C4510	403 057 1905	POLYESTER 0.1U J 50V
C4511	403 057 1905	POLYESTER 0.1U J 50V
C4512	403 057 1905	POLYESTER 0.1U J 50V
C4515	403 139 9102	MT-POLYEST 0.082U J 63V
C4517	403 065 8200	MT-POLYEST 0.27U J 63V
C4518	403 139 8600	MT-POLYEST 0.033U J 63V
C4519	403 065 8002	MT-PLLYEST 0.1U J 63V
C4607	403 062 6209	POLYESTER 0.056U J 50V
C4609	403 057 1905	POLYESTER 0.1U J 50V
C4610	403 057 1905	POLYESTER 0.1U J 50V
C4611	403 057 1905	POLYESTER 0.1U J 50V
C4612	403 057 1905	POLYESTER 0.1U J 50V
C4615	403 139 9102	MT-POLYEST 0.082U J 63V
C4617	403 065 8200	MT-POLYEST 0.27U J 63V
C4618	403 139 8600	MT-POLYEST 0.033U J 63V
C4619	403 065 8002	MT-PLLYEST 0.1U J 63V
CN460	614 229 0279	ASSY,CONNECTOR-P,2P,TO VOL MOTOR
CN461	614 017 2539	PLUG,2P,TO VOL LED PCB
CN462	614 226 0067	SOCKET,9P,TO MICON PCB
CN463	614 226 0050	SOCKET,8P,TO MICON PCB
CN464	614 226 0067	SOCKET,9P,TO MICON PCB
CN465	614 226 8230	SOCKET,6P(RCA), AUDIO(AV-OUT·AV-IN·PHONO)
CN466	614 226 0012	SOCKET,4P,TO MAIN-AMP. PCB
D4057	407 013 7109	DIODE 1S2473
D4058	407 007 9904	DIODE GMA01
D4953	407 053 5806	ZENER DIODE MTZ4.7B
D4954	407 053 5806	ZENER DIODE MTZ4.7B
D4955	407 053 6308	ZENER DIODE MTZ5.1B
D4956	407 053 7701	ZENER DIODE MTZ6.8C
D4957	407 053 7701	ZENER DIODE MTZ6.8C
D4958	407 053 6407	ZENER DIODE MTZ5.1C
IC451	409 232 7205	IC XRU4051B
IC452	409 232 7205	IC XRU4051B
IC453	409 238 6806	IC RC4558S-D,MIC MIX
IC454	409 238 6806	IC RC4558S-D,GEQ BUFFER
IC455	409 114 4803	IC LB1641,MOTOR DRIVE
IC456	409 088 4007	IC LC7522,7-GEQ VR
IC457	409 238 6806	IC RC4558S-D,D'BASS
IC472	409 238 6806	IC RC4558S-D,PHONO
L451	614 027 9214	CHOKE COIL
Q4056	405 000 6104	TR DTC144ES
Q4057	405 000 6104	TR DTC144ES
Q4058	405 000 0508	TR DTA114ES
Q4059	405 000 0508	TR DTA114ES
Q4500	405 011 8609	TR 2SC1740S
Q4502	405 011 8609	TR 2SC1740S
Q4503	405 011 8609	TR 2SC1740S
Q4504	405 011 8609	TR 2SC1740S
Q4505	405 011 8609	TR 2SC1740S
Q4506	405 011 8609	TR 2SC1740S
Q4507	405 011 8609	TR 2SC1740S
Q4508	405 011 8609	TR 2SC1740S
Q4509	405 011 8609	TR 2SC1740S
Q4510	405 011 8609	TR 2SC1740S
Q4600	405 011 8609	TR 2SC1740S
Q4602	405 011 8609	TR 2SC1740S
Q4603	405 011 8609	TR 2SC1740S
Q4604	405 011 8609	TR 2SC1740S
Q4605	405 011 8609	TR 2SC1740S
Q4606	405 011 8609	TR 2SC1740S
Q4607	405 011 8609	TR 2SC1740S
Q4608	405 011 8609	TR 2SC1740S
Q4609	405 011 8609	TR 2SC1740S
Q4610	405 011 8609	TR 2SC1740S
R4956	⚠402 004 4303	FUSIBLE RES 10 J-1/4W
RA456	614 218 0464	RESISTOR,100K X8
OR	614 209 3696	RESISTOR,100K X8

REF.NO.	PART NO.	DESCRIPTION
RA457	614 218 0464	RESISTOR,100K X8
OR	614 209 3696	RESISTOR,100K X8
VR451	614 228 1338	VR,ROTARY,250K OHM,BALANCE
VR452	614 219 2634	VR,ROTARY,50K OHM(W/MOTOR), MASTER VOLUME

VIDEO TERMINAL P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
74	614 234 2268	ASSY,PCB,VIDEO
CN451	614 226 0128	SOCKET,15P,TO MICON PCB
CN453	614 226 0081	SOCKET,11P,TO MAIN-AMP. PCB
CN455	614 230 0107	SOCKET,1P(RCA),AV-IN
CN483	614 230 0107	SOCKET,1P(RCA),MONITOR OUT
D4451	407 053 5806	ZENER DIODE MTZ4.7B
D4454	407 012 4406	DIODE 1SS133
IC458	409 232 1807	IC XRU4052B
Q4452	405 006 1806	TR 2SA933S-R
Q4453	405 011 8609	TR 2SC1740S-S
R4461	⚠402 004 4303	FUSIBLE RES 10 J-1/4W
R4978	⚠401 059 2807	OXIDE-MT 150 JA 1W

VOLUME LED P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
75	614 234 2312	ASSY,PCB,VOL LED
CN480	614 229 0941	ASSY,CONNECTOR-S,2P, TO PRE-AMP. PCB
D4075	408 014 3909	LED SLP-190B-14-AB-T1,VOL POINTER

MICRO PROCESSOR P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
76	614 234 2244	ASSY,PCB,MICON
	614 217 7266	LUG,WIRE FIX(L=30MM)
C4060	403 038 4505	ELECT 1000U M 6.3V
C4960	403 047 6309	ELECT 470U M 25V
CN467	614 226 9992	SOCKET,8P,TO FRONT PCB
CN468	614 227 0011	SOCKET,10P,TO FRONT PCB
CN469	614 227 0011	SOCKET,10P,TO FRONT PCB
CN470	614 220 9066	JACK,HEADPHONE
CN471	614 225 9931	PLUG,9P,TO PRE-AMP. PCB
CN472	614 225 9924	PLUG,8P,TO PRE-AMP. PCB
CN473	614 225 9931	PLUG,9P,TO PRE-AMP. PCB
CN474	614 225 9993	PLUG,15P,TO VIDEO PCB
CN475	614 227 2978	SOCKET,15P,TO DECK UNIT
CN476	614 227 2961	SOCKET,13P,TO TUNER UNIT
CN477	614 227 2985	SOCKET,15P,TO CD UNIT
CN479	614 020 6623	SOCKET,10P,TO P.T-SEC. PCB
CN484	614 020 6579	SOCKET,5P,SP TERMINAL
D4055	407 007 9904	DIODE GMA01
D4056	407 007 9904	DIODE GMA01
D4059	407 012 4406	DIODE 1SS133
D4060	407 012 4406	DIODE 1SS133
D4062	407 004 9105	DIODE DSF10C
D4063	407 013 7109	DIODE 1S2473
D4064	407 013 7109	DIODE 1S2473
D4065	407 013 7109	DIODE 1S2473
D4068	407 013 7109	DIODE 1S2473
D4076	407 007 9904	DIODE GMA01
D4077	407 013 7109	DIODE 1S2473
D4078	407 013 7109	DIODE 1S2473
D4080	407 007 9904	DIODE GMA01
D4081	407 007 9904	DIODE GMA01

PARTS LIST (AMPLIFIER)

REF.NO.	PART NO.	DESCRIPTION
D4082	407 013 7109	DIODE 1S2473
D4086	407 007 9904	DIODE GMA01
D4087	407 007 9904	DIODE GMA01
D4088	407 012 4406	DIODE 1SS133
D4089	407 005 4505	DIODE DS442X
D4951	407 053 3802	ZENER DIODE MTZ15C
D4952	407 053 3703	ZENER DIODE MTZ15B
D4959	407 004 9105	DIODE DSF10C
D4960	407 004 9105	DIODE DSF10C
D4961	407 004 9105	DIODE DSF10C
D4962	407 004 9105	DIODE DSF10C
HS401	614 203 7362	HEAT SINK,+B
HS402	614 203 7362	HEAT SINK,-B
IC459	410 112 6805	IC LC66506B-4582
IC461	409 229 8406	IC RC78M05FA,MICON+B
IC462	409 218 3900	IC RC7812FA,MOTOR +B
L452	614 028 4256	FILTER
Q4051	405 006 1806	TR 2SA933S-R
Q4052	405 075 4906	TR DTC113ZS
Q4054	405 000 3103	TR DTC114ES
Q4055	405 000 0508	TR DTA114ES
Q4060	405 000 3103	TR DTC114ES
Q4061	405 082 4609	TR DTA123YS
Q4062	405 011 8609	TR 2SC1740S-S
Q4063	405 000 3806	TR DTC114YS
Q4064	405 000 3806	TR DTC114YS
Q4065	405 000 0508	TR DTA114ES
Q4066	405 000 3400	TR DTC114TS
Q4951	405 035 7206	TR 2SD1913-S
Q4952	405 007 2109	TR 2SB514-E
R4586	401 009 5506	CARBON 330 JB 1/2W
R4686	401 009 5506	CARBON 330 JB 1/2W
R4960	⚠401 068 7305	OXIDE-MT 56 JA 2W
R4961	⚠401 068 7305	OXIDE-MT 56 JA 2W
R4962	⚠401 064 1406	OXIDE-MT 0.33 JA 2W
R4964	⚠402 004 4303	FUSIBLE RES 10 J-1/4W
R4965	⚠402 004 3801	FUSIBLE RES 1 J-1/4W
R4977	⚠401 065 3201	OXIDE-MT 120 JA 2W
RA451	614 217 1295	RESISTOR 10K X4
OR	614 209 3603	RESISTOR 10K X4
RA452	614 217 1400	RESISTOR 10K X15
OR	614 209 8561	RESISTOR 10K X15
RA453	614 217 1400	RESISTOR 10K X15
OR	614 209 8561	RESISTOR 10K X15
RA454	614 217 1318	RESISTOR 10K X6
OR	614 209 3641	RESISTOR 10K X6
RA455	614 217 1295	RESISTOR 10K X4
OR	614 209 3603	RESISTOR 10K X4
RA458	614 217 1318	RESISTOR 10K X6
OR	614 209 3641	RESISTOR 10K X6
RA459	614 217 1288	RESISTOR 10K X3
OR	614 209 3580	RESISTOR 10K X3
X4051	614 215 5523	RESONATOR,4.19MHZ

SPEAKER TERMINAL P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
77	614 234 2275	ASSY,PCB,SP TERMINAL
C4555	403 062 5905	POLYESTER 5600P M 50V
C4655	403 062 5905	POLYESTER 5600P M 50V
C4706	403 057 3800	POLYESTER 0.1U M 50V
C4707	403 057 3800	POLYESTER 0.1U M 50V
C4806	403 057 3800	POLYESTER 0.1U M 50V
C4807	403 057 3800	POLYESTER 0.1U M 50V
CN404	614 226 8247	TERMINAL,4P,SP
CN407	614 214 8624	PLUG,4P,TO MAIN-AMP. PCB
CN485	614 020 6579	SOCKET,5P,MICON

REF.NO.	PART NO.	DESCRIPTION
R4706	401 010 5601	CARBON 5.6 JB 1/2W
R4806	401 010 5601	CARBON 5.6 JB 1/2W

MAIN AMPLIFIER P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
78	614 234 2282	ASSY,PCB,MAIN AMP
	614 229 0286	ASSY,CONNECTOR-S,3P(CN400)
C4900	403 057 3800	POLYESTER 0.1U M 50V
C4901	403 057 3800	POLYESTER 0.1U M 50V
C4912	403 200 0304	ELECT 3300U M 35V
C4913	403 200 0304	ELECT 3300U M 35V
CN400	614 020 1222	SOCKET,3P,TO P.T SEC. PCB
CN401	614 214 8631	SOCKET,4P,TO SP PCB
CN402	614 225 9887	PLUG,4P,TO PRE-AMP. PCB
CN403	614 225 9955	PLUG,11P,TO VIDEO PCB
D4400	407 012 4406	DIODE 1SS133
D4401	407 012 4406	DIODE 1SS133
D4402	407 053 5806	ZENER DIODE MTZ4.7B
D4403	407 053 5806	ZENER DIODE MTZ4.7B
D4404	407 012 4406	DIODE 1SS133
D4415	407 005 4505	DIODE DS442X
D4416	407 013 7109	DIODE 1S2473
D4900	⚠407 077 7800	DIODE RBV-402LF-A
FCP01	614 208 4540	FUSE HOLDER,FOR F4700
FCP02	614 208 4540	FUSE HOLDER,FOR F4700
FCP03	614 208 4540	FUSE HOLDER,FOR F4800
FCP04	614 208 4540	FUSE HOLDER,FOR F4800
IC403	⚠409 047 0903	IC STK4152MK2
Q4400	405 000 0904	TR DTA114YS
Q4401	405 000 3806	TR DTC114YS
Q4402	405 018 0200	TR 2SC3331-U
Q4700	405 011 8609	TR 2SC1740S-S
Q4701	405 011 8609	TR 2SC1740S-S
Q4800	405 011 8609	TR 2SC1740S-S
Q4801	405 011 8609	TR 2SC1740S-S
R4711	401 008 7204	CARBON 2.2K JB 1/2W
R4811	401 008 7204	CARBON 2.2K JB 1/2W
R4900	⚠402 023 1703	FUSIBLE RES 100 J-1/4W
R4901	⚠402 023 1703	FUSIBLE RES 100 J-1/4W
RE900	614 224 4531	RELAY,AF SIGNAL

P.T PRIMARY P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
79	614 234 2299	ASSY,PCB,PT PRI
CN415	⚠614 123 2089	TERMINAL,1P,AC IN
CN416	⚠614 123 2089	TERMINAL,1P,AC IN
FCP05	614 208 4540	FUSE HOLDER
FCP06	614 208 4540	FUSE HOLDER
L4900	⚠614 229 0439	INDUCTOR,FERITE,WITH COVER

P.T SECONDARY P.C.BOARD ASSY

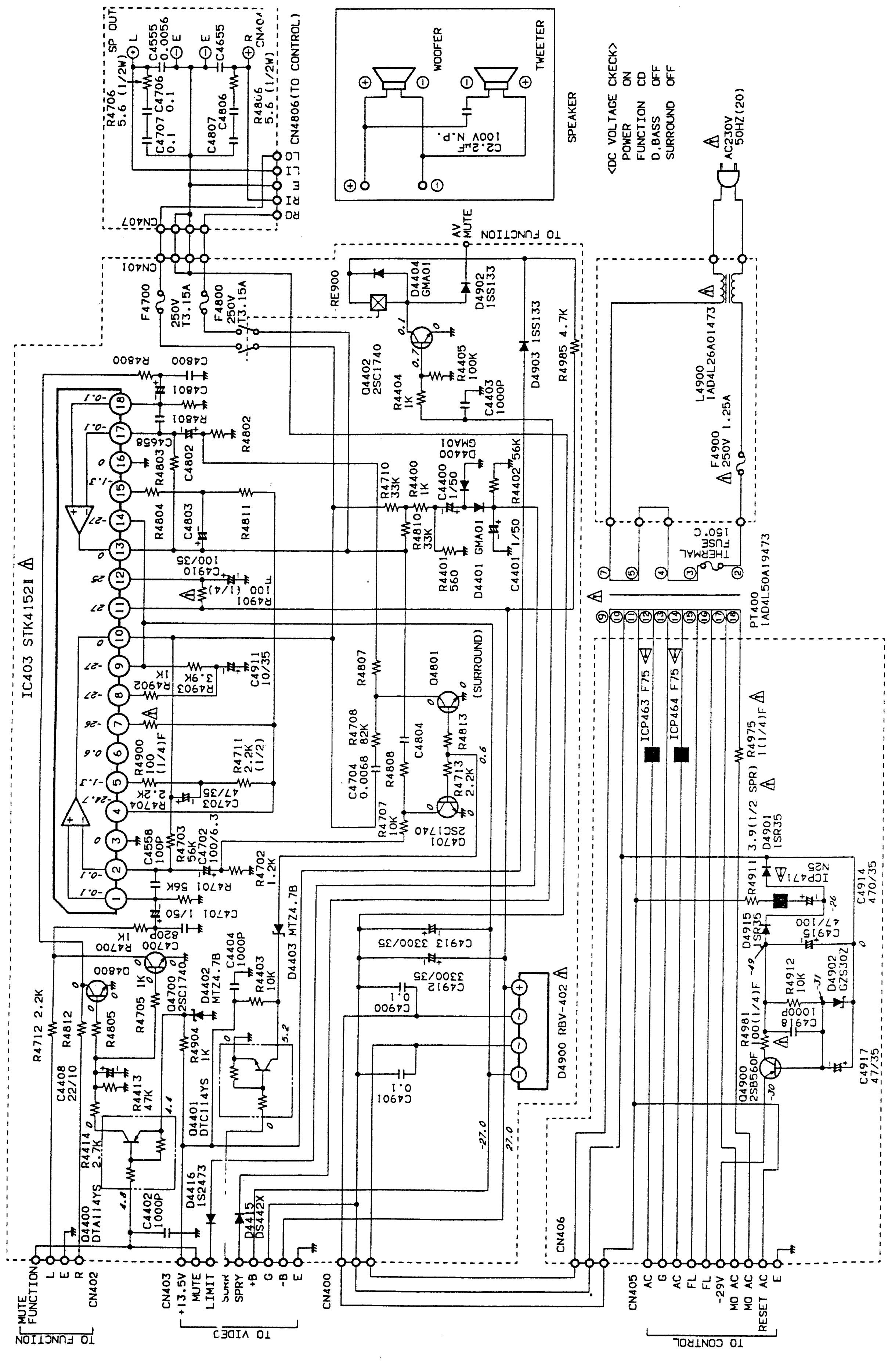
REF.NO.	PART NO.	DESCRIPTION
80	614 234 2305	ASSY,PCB,PT SEC
C4914	403 054 2608	ELECT 470U M 35V
C4915	404 051 1304	ELECT 47U M 100V
CN405	614 020 8917	SOCKET,10P,TO MICON PCB
CN406	614 017 0788	PLUG,3P,TO MAIN-AMP.PCB
D4901	407 012 3300	DIODE 1SR35-200A
D4902	⚠407 070 4806	ZENER DIODE GZS30Z
D4915	407 012 3300	DIODE 1SR35-200A
ICP463	⚠614 002 3329	IC-PROTECTOR ICP-F75
ICP464	⚠614 002 3329	IC-PROTECTOR ICP-F75

PARTS LIST (AMPLIFIER)

REF.NO.	PART NO.	DESCRIPTION
ICP471	⚠614 002 3367	IC-PROTECTOR ICP-N25
Q4900	405 007 5308	TR 2SB560-F-MP
R4911	⚠402 044 7906	RESISTOR 3.9 J-1/2W
R4975	⚠402 004 3801	FUSIBLE RES 1 J-1/4W
R4981	⚠402 023 1703	FUSIBLE RES 100 J-1/4W

MEMO

SCHEMATIC DIAGRAM (AMPLIFIER - POWER)

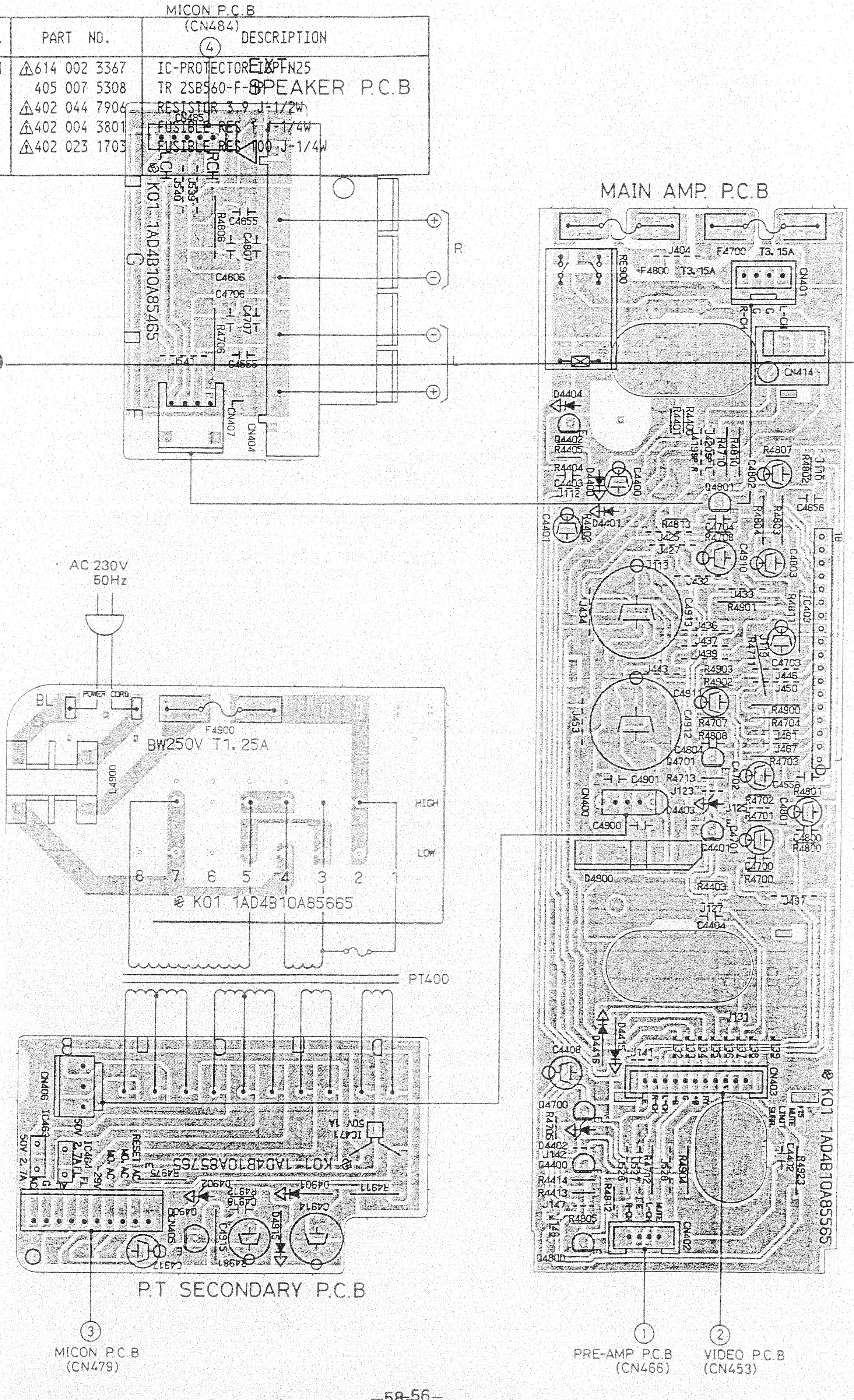

SP OUT
R4706 5.6 (1/2W)
C4707 0.1
C4706 0.1
C4555 0.0056
C4807
C4806
C4655
R4806 5.6 (1/2W)
CN4806 (TO CONTROL)
CN407
CN401
WOOFER
TWEETER
C2.2μF 100V N.P.
SPEAKER
<DC VOLTAGE CKECK>
POWER ON
FUNCTION CD
D.BASS OFF
SURROUND OFF
AC230V 50HZ(20)
AV MUTE
TO FUNCTION
F4700 250V T3.15A
F4800 250V T3.15A
RE900
D4404 GMA01
D4902 1SS133
D4903 1SS133
R4985 4.7K
Q4402 2SC1740
R4405 100K
R4404 1K
C4403 1000P
L4900 1AD4L26A01473
F4900 250V 1.25A
THERMAL FUSE 150°C
PT400 1AD4L50A19473
IC403 STK4152II
R4800
C4800
C4801
R4801
R4802
C4658
R4803
C4802
R4804
C4803
R4811
C4910 100/35
R4901 100 (1/4)
R4710 33K
R4400 1K
C4400 1/50
D4400 GMA01
R4402 56K
R4810 33K
R4401 560
D4401 GMA01
C4401 1/50
R4903 3.9K
R4902 1K
C4911 10/35
R4807
Q4801
(SURROUND)
R4708 82K
C4704 0.0068
R4808
C4804
R4813
R4713 2.2K
R4900 100 (1/4)F
R4711 2.2K (1/2)
R4704 2.2K
C4703 47/35
R4707 10K
Q4701 2SC1740
C4558 100P
R4703 56K
C4702 100/6.3
R4702 1.2K
R4701 56K
C4701 1/50
ICP463 F75
ICP464 F75
R4975 1(1/4)F
3.9(1/2 SPR)
D4901 1SR35
R4911
ICP471 N25
C4914 470/35
R4700 1K
C4700 820P
Q4800
Q4700 2SC1740
R4705 1K
D4402 MTZ4.7B
C4404 1000P
R4403 10K
D4403 MTZ4.7B
C4913 3300/35
C4912 3300/35
C4900 0.1
C4901 0.1
D4900 RBV-402
D4915 1SR35
C4915 47/100
R4912 10K
D4902 GZS30Z
R4981 100(1/4)F
C4916 1000P
Q4900 2SB560F
C4917 47/35
R4712 2.2K
R4812
R4805
C4408 22/10
R4413 47K
R4414 2.7K
Q4400 DTA114YS
C4402 1000P
R4904 1K
Q4401 DTC114YS
D4416 1S2473
D4415 DS442X
CN406
MUTE FUNCTION
L
E
R
CN402
TO FUNCTION
CN403
+13.5V
MUTE LIMIT
SURR SPRY
+B
G
-B
E
TO VIDEO
CN400
CN405
AC
G
AC
FL
FL
-29V
MO AC
MO AC
RESET AC
E
TO CONTROL

PARTS LIST (AMPLIFIER)

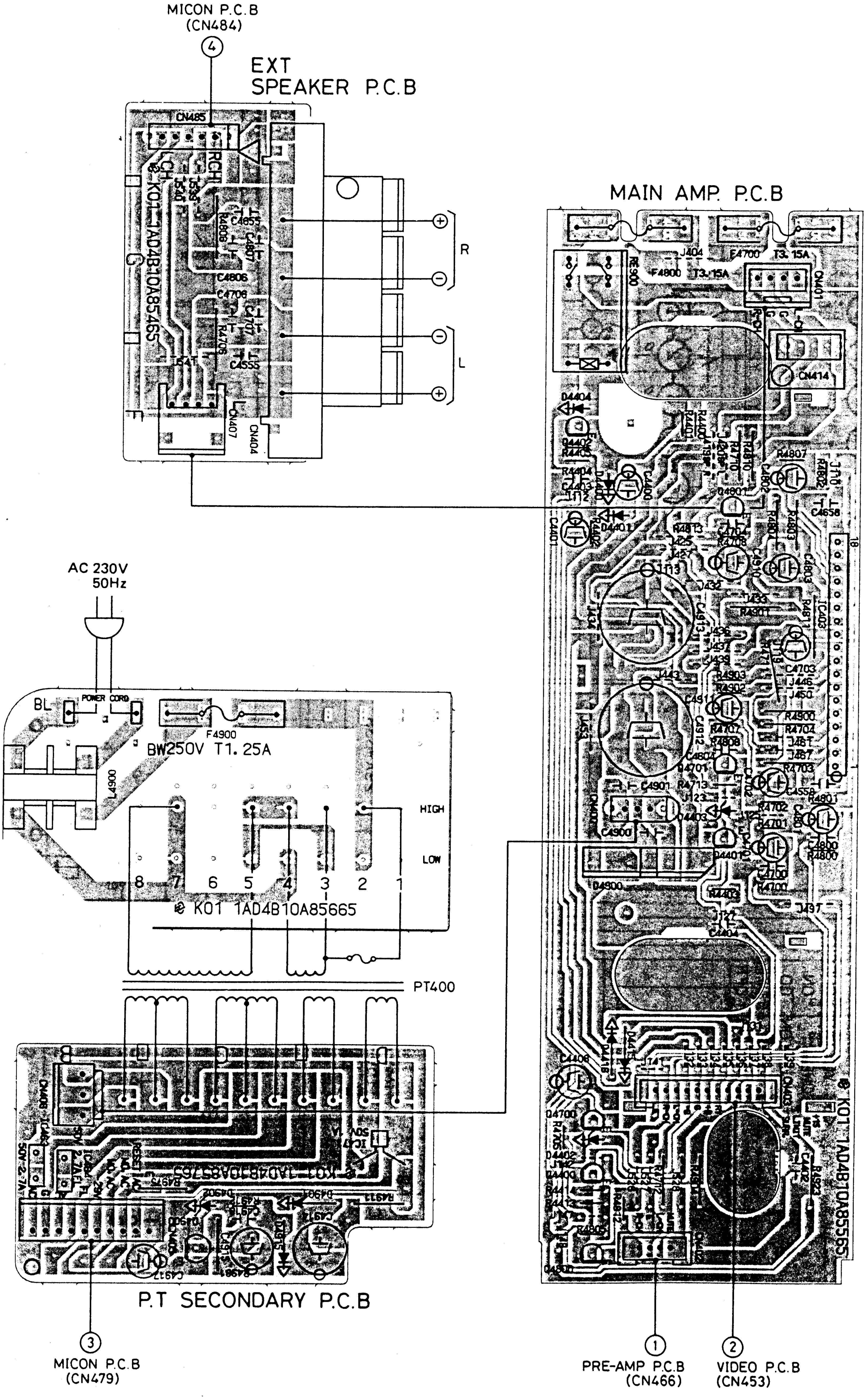
WIRING DIAGRAM (AMPLIFIER - POWER)

REF.NO.	PART NO.	DESCRIPTION
ICP471	⚠614 002 3367	IC-PROTECTOR ICP-N25
Q4900	405 007 5308	TR 2SB560-F-E
R4911	⚠402 044 7906	RESISTOR 3.9 J-1/2W
R4975	⚠402 004 3801	FUSIBLE RES 1 J-1/4W
R4981	⚠402 023 1703	FUSIBLE RES 100 J-1/4W

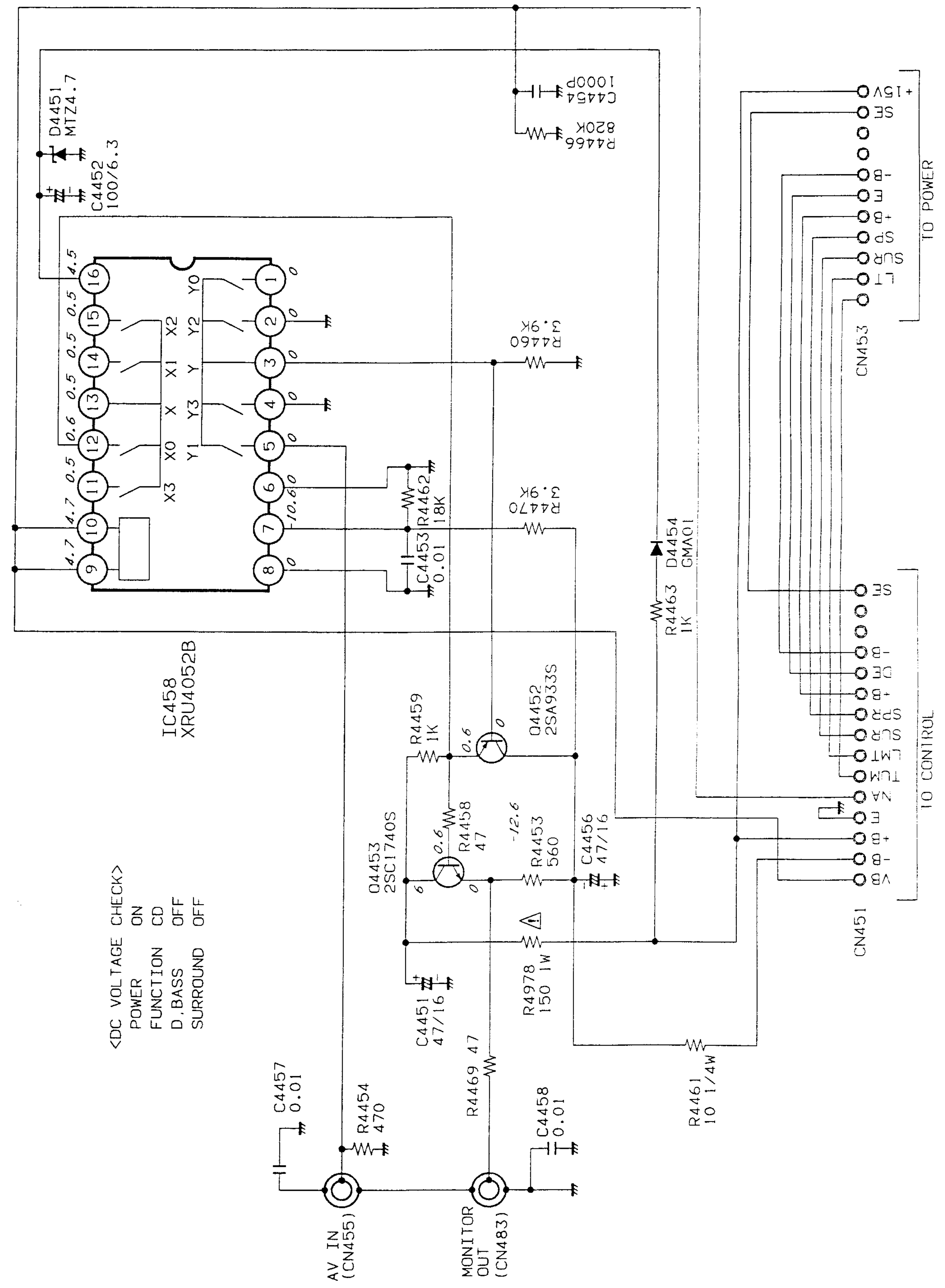
MEMO


MICON P.C.B
(CN484)
④
EXT
SPEAKER P.C.B
CN485
L-CH
R-CH
K01 1AD4B10A85465
C4655
R4806
C4807
C4806
C4706
C4707
R4706
J541
C4555
CN407
CN404
R
L
MAIN AMP. P.C.B
J404
F4700 T3.15A
F4800 T3.15A
RE900
CN401
CN414
D4404
Q4402
R4405
R4404
C4400
Q4901
R4807
R4802
C4658
C4401
D4401
R4813
C4910
C4403
C4913
R4901
R4811
C4703
R4903
R4902
C4911
C4912
R4707
R4808
R4900
R4704
R4703
Q4701
C4901
R4713
J123
D4403
R4702
R4701
C4801
CN400
C4900
D4401
C4800
R4800
C4700
R4700
D4900
R4403
C4404
J131
C4408
CN403
K01 1AD4B10A85565
MUTE
LIMIT
SURR.
C4402
R4823
D4700
R4706
D4402
D4400
R4414
R4413
R4805
R4914
CN402
D4800
AC 230V
50Hz
BL
POWER CORD
F4900
BW250V T1.25A
L4900
HIGH
LOW
8 7 6 5 4 3 2 1
K01 1AD4B10A85665
PT400
CN406
IC469
50V 2.7A
50V 2.7A
IC484
29V
RESET
AC
FL
K01 1AD4B10A85765
IC471
50V AV
R4975
R4911
D4902
D4901
R4978
C4914
D4900
CN405
C4915
D4915
R4981
C4917
P.T SECONDARY P.C.B
③
MICON P.C.B
(CN479)
①
PRE-AMP P.C.B
(CN466)
②
VIDEO P.C.B
(CN453)

WIRING DIAGRAM (AMPLIFIER - POWER)

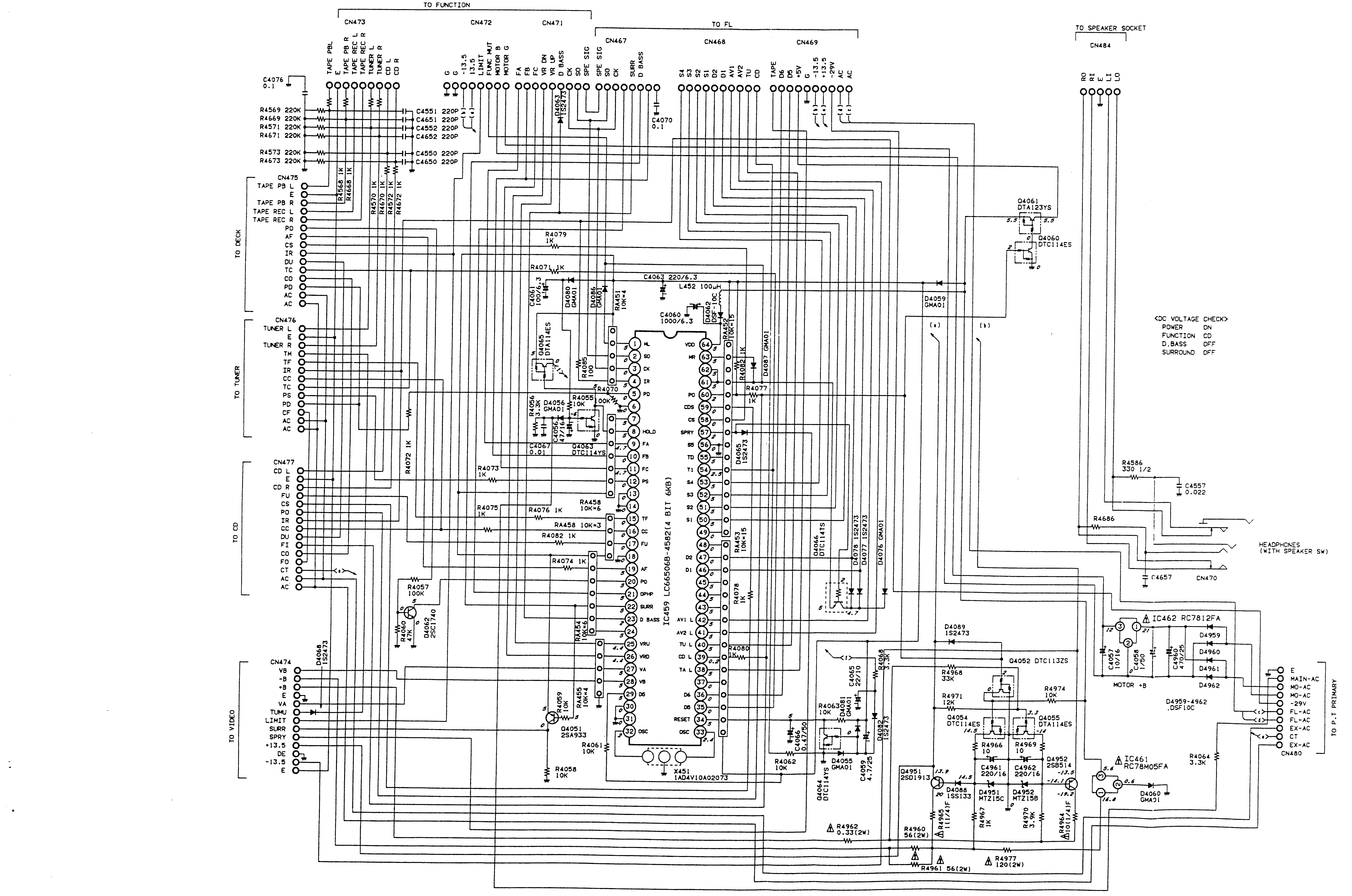

MICON P.C.B (CN484)
④
EXT SPEAKER P.C.B
CN485
RCH
LCH
CN407
CN404
R
L
MAIN AMP. P.C.B
F4700 T3.15A
F4800 T3.15A
CN401
CN414
IC403
IC401
K01 1AD4B10A85565
AC 230V 50Hz
POWER CORD
BL
F4900
BW250V T1.25A
L4900
HIGH
LOW
8 7 6 5 4 3 2 1
K01 1AD4B10A85665
PT400
CN408
P.T SECONDARY P.C.B
③
MICON P.C.B (CN479)
①
PRE-AMP P.C.B (CN466)
②
VIDEO P.C.B (CN453)

SCHEMATIC DIAGRAM (AMPLIFIER - VIDEO)

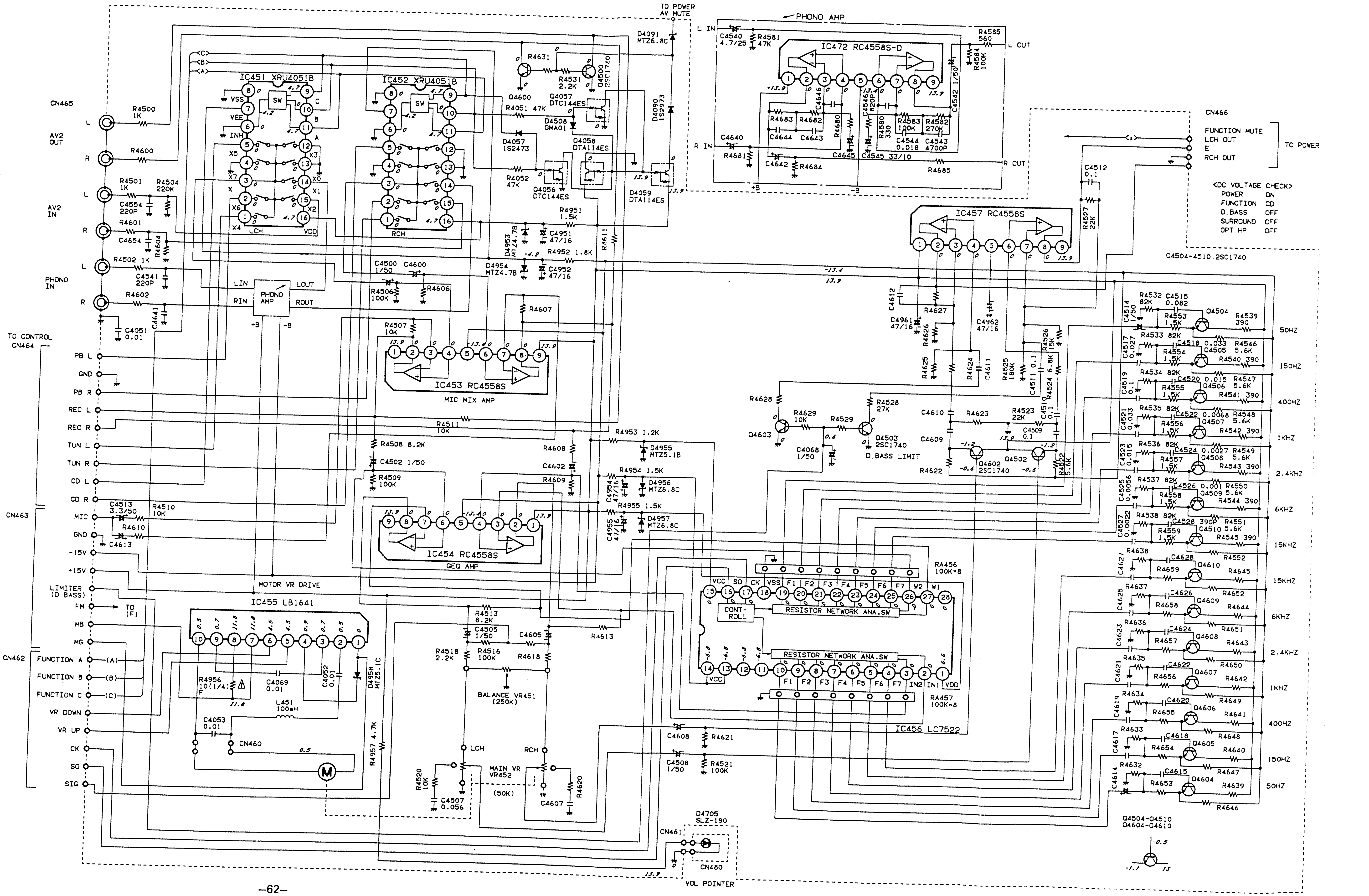

IC458
XRU4052B
X0
X1
X2
X3
X
Y0
Y1
Y2
Y3
Y
D4451 MTZ4.7
C4452 100/6.3
C4454 1000P
R4466 820K
R4460 3.9K
R4462 18K
C4453 0.01
R4470 3.9K
D4454 GMA01
R4463 1K
R4459 1K
Q4452 2SA933S
Q4453 2SC1740S
R4458 47
R4453 560
C4456 47/16
R4978 150 1W
C4451 47/16
R4469 47
R4461 10 1/4W
C4457 0.01
R4454 470
C4458 0.01
AV IN (CN455)
MONITOR OUT (CN483)
CN453
TO POWER
+15V
SE
B-
E
B+
SP
SUR
LT
CN451
TO CONTROL
SE
B-
CE
B+
SPR
SUR
LMT
TUM
VA
E
+B
-B
VB
4.5
0.5
0.6
4.7
10.6
0.6
-12.6
6

<DC VOLTAGE CHECK>
POWER ON
FUNCTION CD
D.BASS OFF
SURROUND OFF

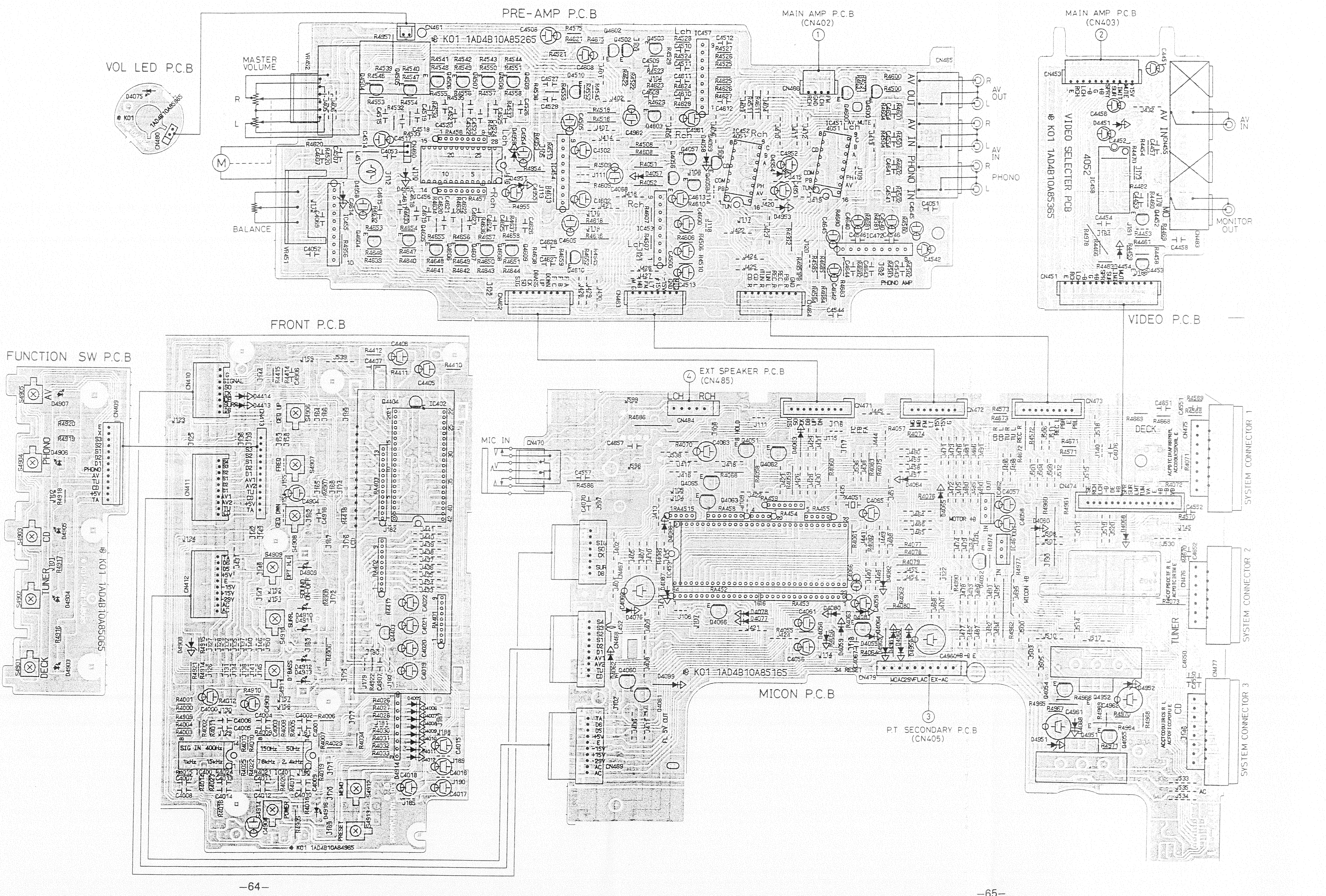
SCHEMATIC DIAGRAM (AMPLIFIER - CONTROL)


TO FUNCTION
CN473
CN472
CN471
TO FL
CN467
CN468
CN469
TO SPEAKER SOCKET
CN484
TAPE PBL
E
TAPE PB R
TAPE REC L
TAPE REC R
TUNER L
TUNER R
CD L
CD R
G
G
-13.5
13.5
LIMIT
FUNC MUT
MOTOR B
MOTOR G
FA
FB
FC
VR DN
VR UP
D BASS
CK
SO
SPE SIG
SPE SIG
SO
CK
SURR
D BASS
S4
S3
S2
S1
D2
D1
AV1
AV2
TU
CD
TAPE
D6
D5
+5V
G
-13.5
+13.5
-29V
AC
AC
RO
RI
E
LI
LO
C4076 0.1
R4569 220K
R4669 220K
R4571 220K
R4671 220K
R4573 220K
R4673 220K
C4551 220P
C4651 220P
C4552 220P
C4652 220P
C4550 220P
C4650 220P
R4568 1K
R4668 1K
R4570 1K
R4670 1K
R4572 1K
R4672 1K
C4070 0.1
D4063 1S2473
CN475
TAPE PB L
E
TAPE PB R
TAPE REC L
TAPE REC R
PO
AF
CS
IR
DU
TC
CO
PD
AC
AC
TO DECK
CN476
TUNER L
E
TUNER R
TM
TF
IR
CC
TC
PS
PD
CF
AC
AC
TO TUNER
CN477
CD L
E
CD R
FU
CS
PO
IR
CC
DU
FI
CO
FO
CT
AC
AC
TO CD
CN474
VB
-B
+B
E
VA
TUMU
LIMIT
SURR
SPRY
+13.5
DE
-13.5
E
TO VIDEO
D4068 1S2473
R4079 1K
R4071 1K
C4061 100/6.3
D4080 GMA01
D4086 GMA01
RA451 10K×4
C4063 220/6.3
L452 100μH
C4060 1000/6.3
D4062 DSF-10C
RA452 10K×15
D4065 DTA114ES
R4085 100
R4070
R4055 100K
R4056 3.3K
D4056 GMA01
C4056 47/16
C4067 0.01
Q4063 DTC114YS
R4072 1K
R4073 1K
R4075 1K
R4076 1K
RA458 10K×6
RA458 10K×3
R4082 1K
R4074 1K
R4057 100K
Q4062 2SC1740
R4060 47K
RA454 10K×6
R4059 10K
Q4051 2SA933
R4058 10K
RA455 10K×4
R4061 10K
X451 1AD4V10A02073
IC459 LC66506B-4582(4 BIT 6KB)
ML
SO
CK
IR
PD
HOLD
FA
FB
FC
PS
TF
CC
FU
AF
PO
DPHP
SURR
D BASS
VRU
VRD
VA
VB
D5
OSC
VDD
MR
PO
CDS
CS
SPRY
S5
TD
T1
S4
S3
S2
S1
D2
D1
AV1 L
AV2 L
TU L
CD L
TA L
D6
D5
RESET
OSC
R4062 1K
D4087 GMA01
R4077 1K
D4065 1S2473
RA453 10K×15
R4078 1K
R4080 1K
D4059 GMA01
D4061 DTA123YS
D4060 DTC114ES
(a)
(b)
D4066 DTC114ES
D4078 1S2473
D4077 1S2473
D4076 GMA01
D4089 1S2473
Q4052 DTC113ZS
R4068 3.3K
C4065 22/10
R4063 10K
D4081 GMA01
C4066 0.47/50
D4082 1S2473
R4062 10K
Q4064 DTC114YS
D4055 GMA01
C4059 4.7/25
R4968 33K
R4971 12K
Q4054 DTC114ES
R4974 10K
Q4055 DTA114ES
R4966 10
R4969 10
C4961 220/16
C4962 220/16
Q4952 2SB514
Q4951 2SD1913
D4088 1SS133
D4951 MTZ15C
D4952 MTZ15B
R4965 1(1/4)F
R4967 1K
R4970 3.9K
R4964 10(1/4)F
R4962 0.33(2W)
R4960 56(2W)
R4961 56(2W)
R4977 120(2W)
IC461 RC78M05FA
D4060 GMA01
IC462 RC7812FA
D4959
D4960
D4961
D4962
C4057 10/16
C4058 1/50
C4960 470/25
MOTOR +B
D4959-4962 .DSF10C
R4064 3.3K
E
MAIN-AC
MO-AC
MO-AC
-29V
FL-AC
FL-AC
EX-AC
CT
EX-AC
CN480
TO P.T PRIMARY
R4586 330 1/2
C4557 0.022
R4686
C4657
CN470
HEADPHONES (WITH SPEAKER SW)
<DC VOLTAGE CHECK>
POWER ON
FUNCTION CD
D.BASS OFF
SURROUND OFF

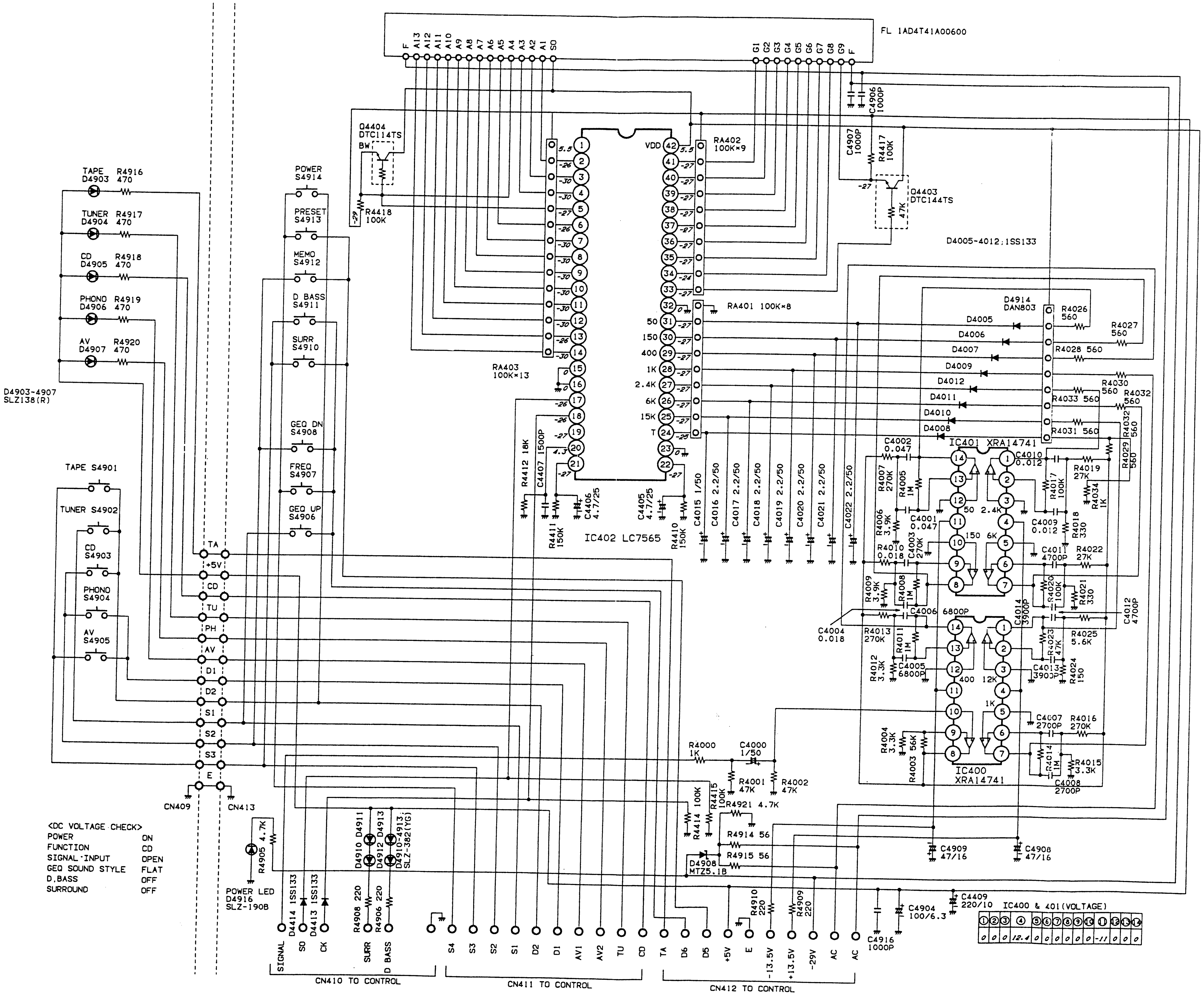
SCHEMATIC DIAGRAM (AMPLIFIER - FUNCTION)


TO POWER
AV MUTE
PHONO AMP
IC472 RC4558S-D
L IN
R IN
L OUT
R OUT
CN465
AV2 OUT
AV2 IN
PHONO IN
L
R
IC451 XRU4051B
IC452 XRU4051B
LCH
RCH
VDD
VSS
VEE
INH
SW
PHONO AMP
LIN
LOUT
RIN
ROUT
+B
-B
IC453 RC4558S
MIC MIX AMP
IC454 RC4558S
GEQ AMP
IC455 LB1641
MOTOR VR DRIVE
IC456 LC7522
CONT-ROLL
RESISTOR NETWORK ANA.SW
RA456 100K×8
RA457 100K×8
IC457 RC4558S
D.BASS LIMIT
BALANCE VR451 (250K)
MAIN VR VR452 (50K)
CN460
CN461
CN480
D4705 SLZ-190
VOL POINTER
L451 100mH
TO CONTROL CN464
CN463
CN462
PB L
GND
PB R
REC L
REC R
TUN L
TUN R
CD L
CD R
MIC
-15V
+15V
LIMITER (D BASS)
FM
TO (F)
MB
MG
FUNCTION A
FUNCTION B
FUNCTION C
VR DOWN
VR UP
CK
SO
SIG
CN466
FUNCTION MUTE
LCH OUT
E
RCH OUT
TO POWER
<DC VOLTAGE CHECK>
POWER ON
FUNCTION CD
D.BASS OFF
SURROUND OFF
OPT HP OFF
Q4504-4510 2SC1740
Q4504-Q4510
Q4604-Q4610
50HZ
150HZ
400HZ
1KHZ
2.4KHZ
6KHZ
15KHZ
D4091 MTZ6.8C
D4090 1S2973
D4057 1S2473
D4508 GMA01
Q4600
Q4500 2SC1740
Q4057 DTC144ES
Q4058 DTA114ES
Q4056 DTC144ES
Q4059 DTA114ES
Q4503 2SC1740
Q4602 2SC1740
Q4502
Q4603
D4953 MTZ4.7B
D4954 MTZ4.7B
D4955 MTZ5.1B
D4956 MTZ6.8C
D4957 MTZ6.8C
D4958 MTZ5.1C
R4956 10(1/4)

WIRING DIAGRAM (AMPLIFIER)


PRE-AMP P.C.B
VOL LED P.C.B
MASTER VOLUME
BALANCE
MAIN AMP P.C.B (CN402)
①
MAIN AMP P.C.B (CN403)
②
AV OUT
AV IN
PHONO
PHONO AMP
VIDEO SELECTER PCB
VIDEO P.C.B
AV IN
MONITOR OUT
FRONT P.C.B
FUNCTION SW P.C.B
AV
PHONO
CD
TUNER
DECK
MIC IN
EXT SPEAKER P.C.B (CN485)
④
LCH
RCH
MICON P.C.B
P.T SECONDARY P.C.B (CN405)
③
DECK
TUNER
CD
SYSTEM CONNECTOR 1
SYSTEM CONNECTOR 2
SYSTEM CONNECTOR 3
K01 1AD4B10A85265
K01 1AD4B10A85365
K01 1AD4B10A85065
K01 1AD4B10A84965
K01 1AD4B10A85165

SCHEMATIC DIAGRAM (AMPLIFIER - FL)


FL 1AD4T41A00600
Q4404 DTC114TS
Q4403 DTC144TS
R4418 100K
RA402 100K×9
RA401 100K×8
RA403 100K×13
IC402 LC7565
VDD
C4907 1000P
C4906 1000P
R4417 100K
D4005-4012:1SS133
D4914 DAN803
IC401 XRA14741
IC400 XRA14741
TAPE D4903 R4916 470
TUNER D4904 R4917 470
CD D4905 R4918 470
PHONO D4906 R4919 470
AV D4907 R4920 470
D4903-4907 SLZ138(R)
POWER S4914
PRESET S4913
MEMO S4912
D BASS S4911
SURR S4910
GEQ DN S4908
FREQ S4907
GEQ UP S4906
TAPE S4901
TUNER S4902
CD S4903
PHONO S4904
AV S4905
TA
+5V
CD
TU
PH
AV
D1
D2
S1
S2
S3
E
CN409
CN413
POWER LED D4916 SLZ-190B
R4905 4.7K
D4414 1SS133
D4413 1SS133
R4908 220
R4906 220
D4910-4913 SLZ-382(YG)
R4000 1K
C4000 1/50
R4001 47K
R4002 47K
R4921 4.7K
R4914 56
R4915 56
D4908 MTZ5.1B
R4910 220
R4909 220
C4909 47/16
C4908 47/16
C4409 220/10
C4904 100/6.3
C4916 1000P
SIGNAL
SO
CK
SURR
D BASS
S4
S3
S2
S1
D2
D1
AV1
AV2
TU
CD
TA
D6
D5
+5V
E
-13.5V
+13.5V
-29V
AC
AC
CN410 TO CONTROL
CN411 TO CONTROL
CN412 TO CONTROL

<DC VOLTAGE CHECK>

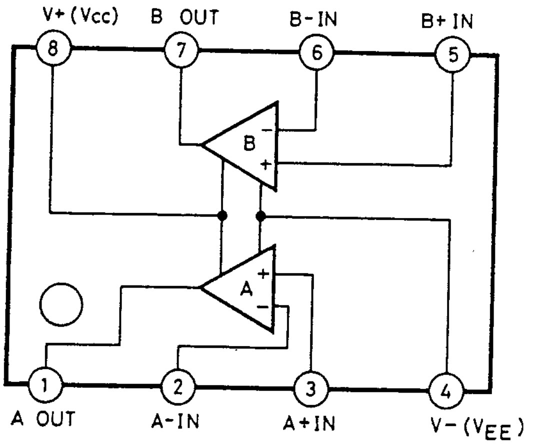
POWER	ON
FUNCTION	CD
SIGNAL·INPUT	OPEN
GEQ SOUND STYLE	FLAT
D.BASS	OFF
SURROUND	OFF

IC400 & 401(VOLTAGE)

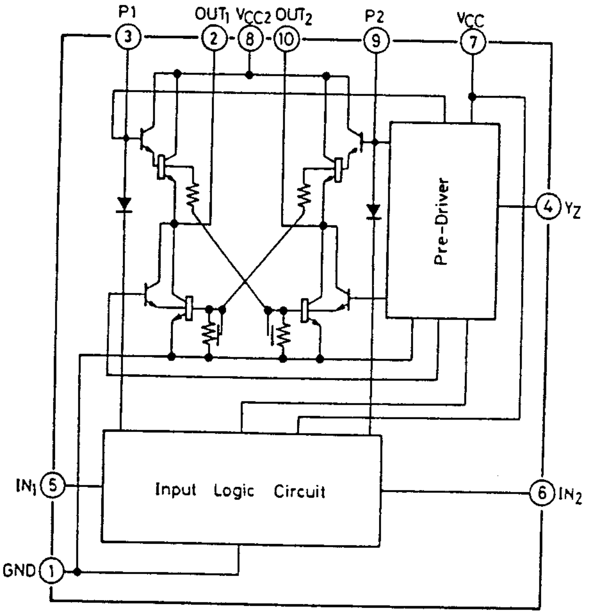
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭
0	0	0	12.4	0	0	0	0	0	0	-11	0	0	0

IC BLOCK DIAGRAM (AMPLIFIER)

IC453・454 RC4558S-D(Dual Operational Amplifier)
IC457・472

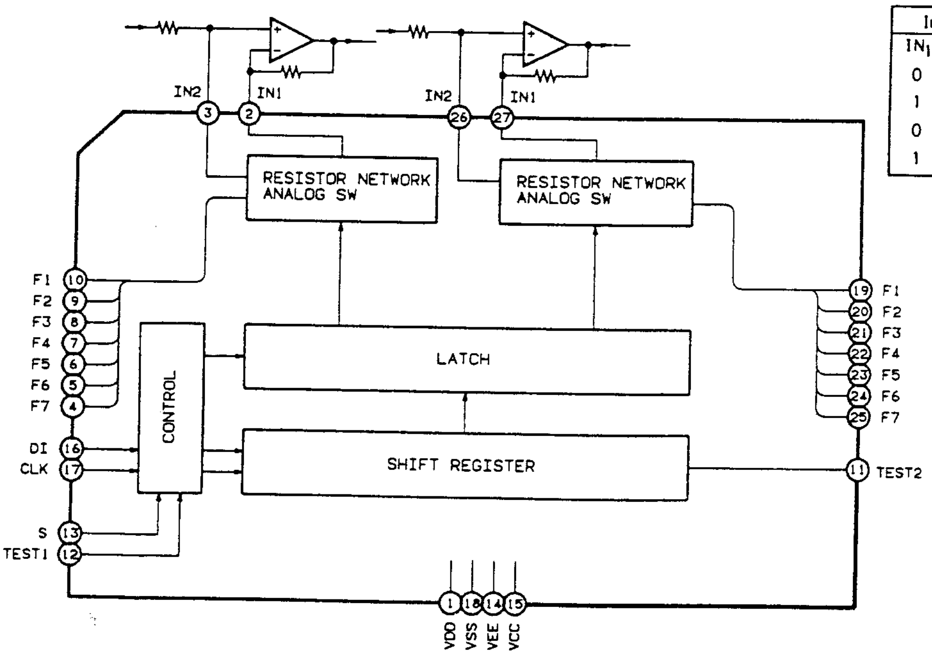

V+(Vcc)
B OUT
B-IN
B+IN
8
7
6
5
B
A
1
2
3
4
A OUT
A-IN
A+IN
V-(V_{EE})

IC455 LB1641(Motor Driver)

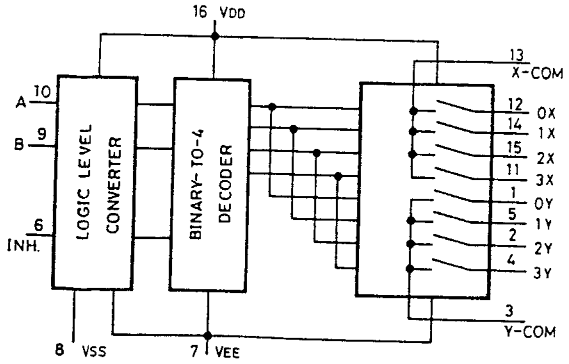

P1
OUT1
VCC2
OUT2
P2
VCC
3
2
8
10
9
7
Pre-Driver
4 YZ
IN1 5
Input Logic Circuit
6 IN2
GND 1

Input		Output		Action
IN_1	IN_2	OUT_1	OUT_2	
0	0	0	0	Brake
1	0	1	0	Normal(Reverse)Rotary
0	1	0	1	Reverse(Normal)Rotary
1	1	0	0	Brake

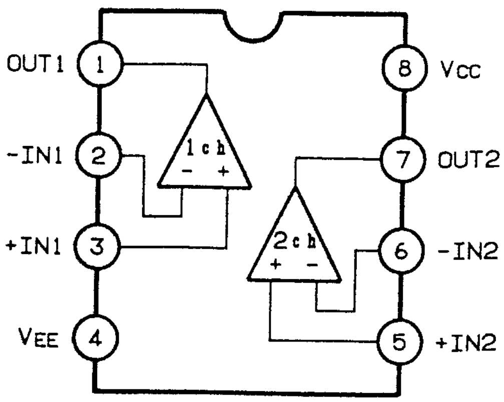
IC456 LC7522(7-Segment Graphic Equalizer Variable Resister)


IN2
IN1
IN2
IN1
3
2
26
27
RESISTOR NETWORK ANALOG SW
RESISTOR NETWORK ANALOG SW
F1 10
F2 9
F3 8
F4 7
F5 6
F6 5
F7 4
CONTROL
LATCH
SHIFT REGISTER
DI 16
CLK 17
S 13
TEST1 12
19 F1
20 F2
21 F3
22 F4
23 F5
24 F6
25 F7
11 TEST2
1 18 14 15
VDD
VSS
VEE
VCC

IC458 XRU4052B(Deferential Multiplexer / DeMultiplexer)

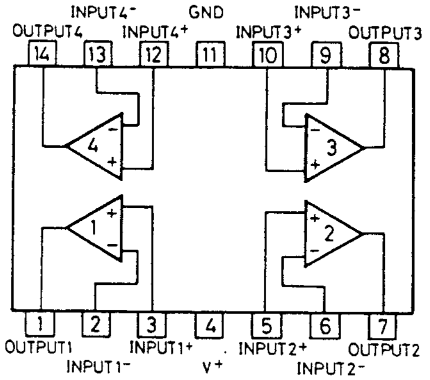

16 VDD
A 10
B 9
6 INH.
LOGIC LEVEL CONVERTER
BINARY-TO-4 DECODER
13 X-COM
12 0X
14 1X
15 2X
11 3X
1 0Y
5 1Y
2 2Y
4 3Y
3 Y-COM
8 VSS
7 VEE

IC460 XRA4558(Dual Operational Amplifier)

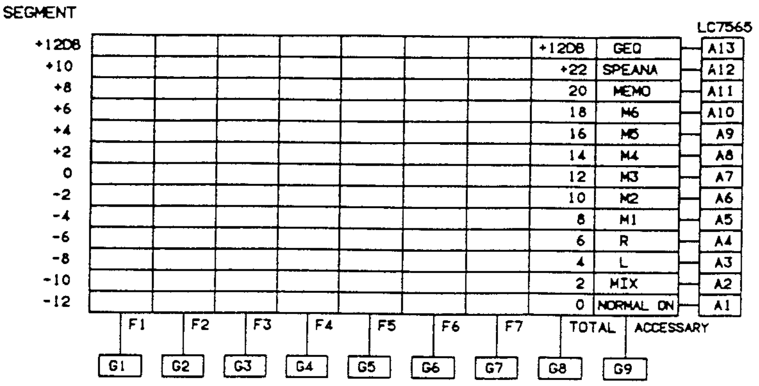

OUT1
1
-IN1
2
+IN1
3
VEE
4
8
Vcc
7
OUT2
6
-IN2
5
+IN2
1ch
2ch

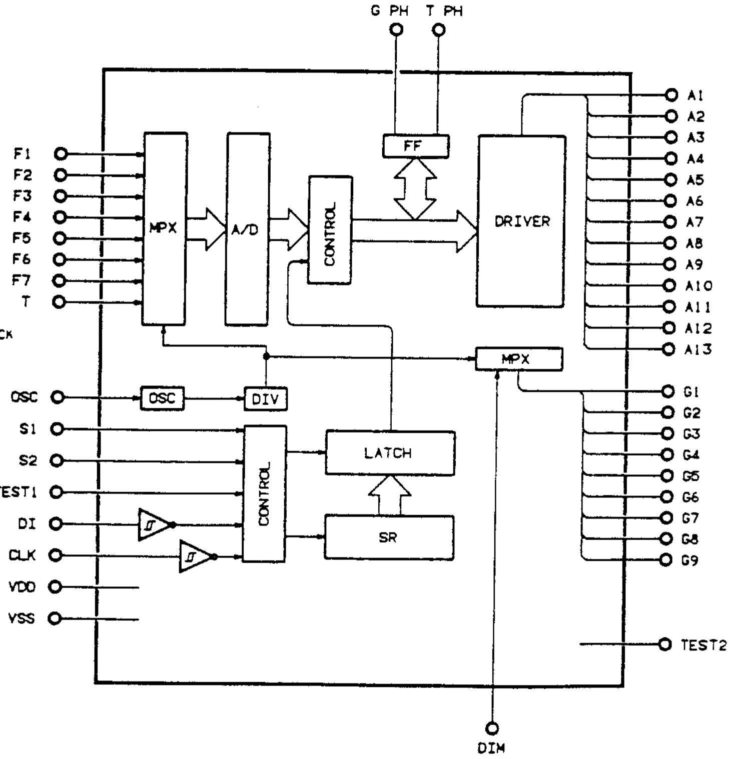
IC BLOCK DIAGRAM (AMPLIFIER)

IC400・401 XRA14741(Dual Operational Amplifier)

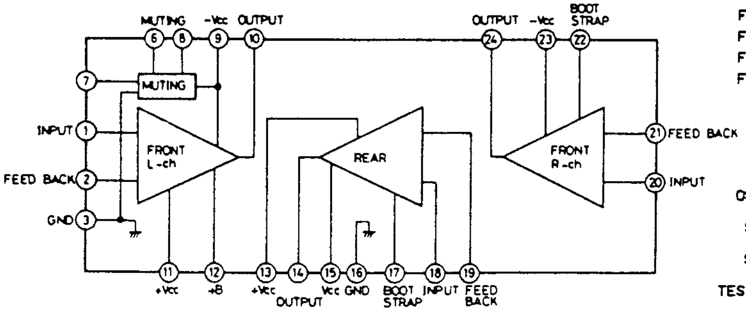

INPUT4⁻
GND
INPUT3⁻
OUTPUT4
INPUT4⁺
INPUT3⁺
OUTPUT3
14
13
12
11
10
9
8
4
3
1
2
1
2
3
4
5
6
7
OUTPUT1
INPUT1⁺
INPUT2⁺
OUTPUT2
INPUT1⁻
V⁺
INPUT2⁻

IC402 LC7565A(Fluorescent Tube Display Driver)


SEGMENT
LC7565
+12DB
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
+12DB GEQ A13
+22 SPEANA A12
20 MEMO A11
18 M6 A10
16 M5 A9
14 M4 A8
12 M3 A7
10 M2 A6
8 M1 A5
6 R A4
4 L A3
2 MIX A2
0 NORMAL ON A1
F1
F2
F3
F4
F5
F6
F7
TOTAL
ACCESSARY
G1
G2
G3
G4
G5
G6
G7
G8
G9


G PH
T PH
F1
F2
F3
F4
F5
F6
F7
T
MPX
A/D
CONTROL
FF
DRIVER
MPX
OSC
DIV
OSC
S1
S2
TEST1
DI
CLK
VDD
VSS
CONTROL
LATCH
SR
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
G1
G2
G3
G4
G5
G6
G7
G8
G9
TEST2
DIM

IC403 STK4152MK2(3-Channel AF Power Amplifier)

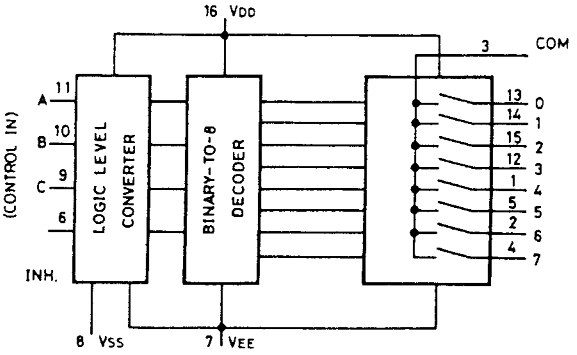

MUTING
-Vcc
OUTPUT
OUTPUT
-Vcc
BOOT STRAP
6
8
9
10
24
23
22
7
MUTING
INPUT
1
FRONT L-ch
FEED BACK
2
GND
3
REAR
FRONT R-ch
21
FEED BACK
20
INPUT
11
12
13
14
15
16
17
18
19
+Vcc
+B
+Vcc
OUTPUT
Vcc GND
BOOT STRAP
INPUT
FEED BACK

IC451・452 XRU4051B(Signal 8-Channel Multiplexer/DeMultiplexer)

TRUTH TABLE

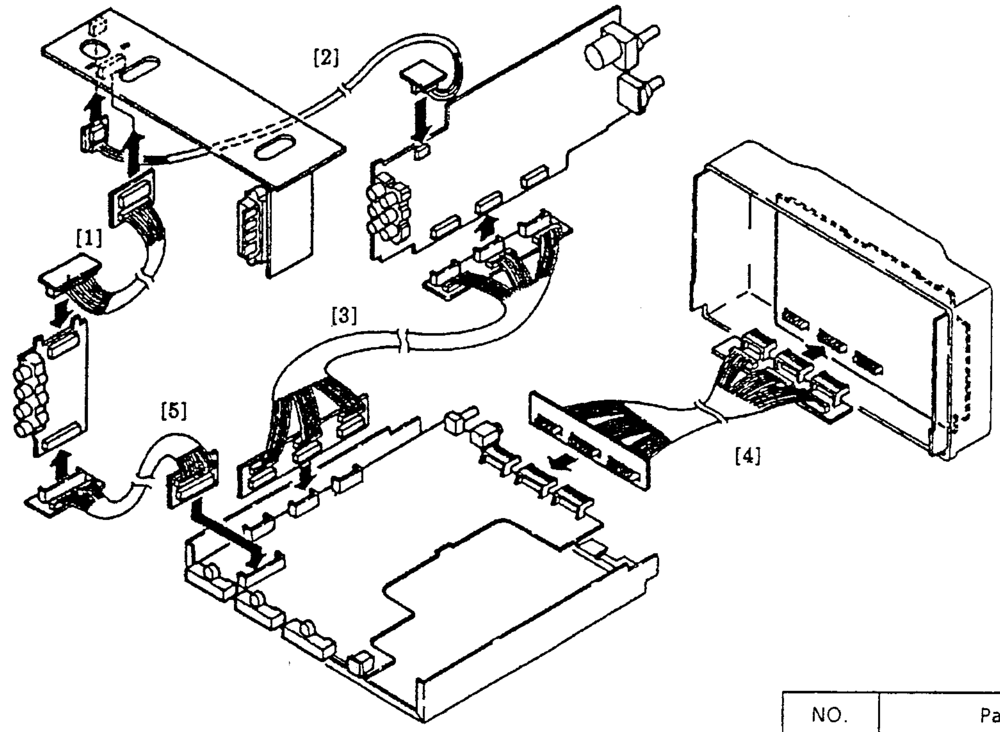
CONTROL INPUTS				"ON" CHANNEL		
INHIBIT	C△	B	A	TC4051BP	TC4052BP	TC4053BP
L	L	L	L	0	0X, 0Y	0X, 0Y, 0Z
L	L	L	H	1	1X, 0Y	1X, 0Y, 0Z
L	L	H	L	2	2X, 2Y	0X, 1Y, 0Z
L	L	H	H	3	3X, 3Y	1X, 1Y, 0Z
L	H	L	L	4	—	0X, 0Y, 1Z
L	H	L	H	5	—	1X, 0Y, 1Z
L	H	H	L	6	—	0X, 1Y, 1Z
L	H	H	H	7	—	1X, 1Y, 1Z
H	※	※	※	NONE	NONE	NONE

※ Don't care. △ Except TC4052BP


16 VDD
3 COM
A 11
B 10
C 9
6
INH.
(CONTROL IN)
LOGIC LEVEL CONVERTER
BINARY-TO-8 DECODER
13 0
14 1
15 2
12 3
1 4
5 5
2 6
4 7
8 VSS
7 VEE

TOOL FOR REPAIRABLE

Please use the tools (PCB relay cord) for repairable.



NO.	Parts code
1	614 231 2568
2	614 231 2544
3	614 231 2537
4	614 231 5220
5	614 231 2551

SANYO FISHER Vertriebs GmbH

Stahlgruberring 4 8000 München 82	Tel : 089/420 45-0 Tlx : 524033
Technisches Labor/ Qualitätskontrolle	Durchwahl -122/121
Service-Zentrale	
Color TV	-166
Hi-Fi/Audio	-168
Video	-172
Autoradio	-170
Ersatzteillager	-155/156/160/164
Techn. Schulung	-174

Unser FISHER-Team steht Ihnen jederzeit gerne zur Verfügung. Ersatzteilbestellungen wickeln Sie bitte ausschließlich mit unserer Service-Zentrale München ab.
Senden Sie uns im Garantiefall Ihren Kaufbeleg ein. Bei unverkauften Lagergeräten des Fachhandels gilt als Garantienachweis eine eidesstattliche Versicherung mit eingetragener Modellbezeichnung und Geräte-Nummer oder ein Liefernachweis. Die gleiche Regelung besteht auch für Reparaturaufträge.
Bitte geben Sie unbedingt die Ersatzteil-Nummer und die Modellbezeichnung an.
Sie sparen so wertvolle Zeit. Vielen Dank.

Jun. / '91 / 800 NS Printed in Japan.

IC BLOCK DIAGRAM (AMPLIFIER)

IC459 LC66506B-4582(4 Bit Micro Processor)

PIN	PIN NAME	DESCRIPTION	HIGH	LOW
1	L MOTOR	Motor Output for Headphone		Rotate
2	SO	Output for LC7565,LC7522 Serial Data	Trans mit	
3	CLK	CLK Output for LC7565,LC7522 Serial Data	Trans mit	
4	IR	Remote Control Input		IN
5	PDOWN	ON/OFF Input of Power Source from TUNER	ON	OFF
6	S1	Select Input of Remote Control Decord Cord		Trans mit
7	S2	Select Input of Remote Control Decord Cord		Trans mit
8	HOLD	Detected Input for Power Failure	Nor-mal	Power Failure
9	4051A	Select Output of IC4051 Audio Signal	1	0
10	4051B	Select Output of IC4051 Audio Signal	1	0
11	4051C	Select Output of IC4051 Audio Signal	1	0
12	TUPOWER	ON/OFF Output of Power Source to Tuner	OUT	
13	S6	Select Input of Remote Control Decord Cord	Trans mite	
14	S3	Select Input of Remote Control Decord Cord		Trans mit
15	TU.AF	Input of TUNER Function	IN	
16	CD.CONT	Input of CD TIMER Control	IN	
17	CD.AF	Input of CD Function	IN	
18	S4	Select Input of Display Device		Trans mit
19	TA.AF	Input of TAPE DECK Function		IN
20	POWER	Input of Procession on Power Failure to TAPE DECK		IN
21	H.PHONE	Select Output of HEADPHONE & Output of Indication LED		ON
22	SURROUND	Select Output of SURROUND & Output of Indication LED		ON
23	D'bass	Select Output of D'BASS & Output of Indication LED		ON
24		Not Used		
25	VOLUP	Motor Output for the Volume		OUT
26	VOLDOWN	Motor Output for the Volume		OUT
27	4052A	Select Output of IC 4052 Video Signal	1	0
28	4052B	Select Output of IC 4052 Video Signal	1	0
29		Not Used		
30	TEST	To Earth		
31	VSS	To Earth		
32	OSC1	CR Oscillation(4.19MHz)		
33	OSC2	CR Oscillation(4.19MHz)		
34	RES	Input of RESET	Nor-mal	RESET
35	DIG5	Input of Key(Digit Output)		OUT
36	DIG6	Input of Key(Digit Output)		OUT
37	DIG7	Not Used		
38	TAPE	Output of Indication LED of TAPE Function		Light Up
39	CD	Output of Indication LED of CD Function		Light Up
40	TUNER	Output of Indication LED of CD Function		Light Up
41		Not Used		
42	AV2	Output of Indication LED of AV2 Function		Light Up
43	AV1	Output of Indication LED of AV1 Function		Light Up
44		Not Used		
45		Not Used		
46	DIG1	Input of Key(Digit output)		OUT
47	DIG2	Input of Key(Digit output)		OUT
48	DIG3	Not Used		
49	DIG4	Not Used		
50	SEG1	Input of Key Segment		IN
51	SEG2	Input of Key Segment		IN
52	SEG3	Input of Key Segment		IN
53	SEG4	Input of Key Segment		IN
54	T.CONT	Control Input of TAPE DECK TIMER	REC	PLAY
55		Not Used		
56	S5	Select Input of Remote Control Decord Cord		Trans mit
57	SPRELAY	ON/OFF Output of Speaker Relay	ON	OFF
58	T.CSTOP	CSTOP Output of TAPE DECK (System Movement)	OUT	
59	CD.CSTOP	CSTOP Output of CD (System Movement)	OUT	
60	RELAY	ON/OFF Output of POWER Control	ON	OFF
61	∞DB	MUTE Output of ∞	OFF	ON
62	-20DB	MUTE Output of -20dB	OFF	ON
63	R MOTOR	Motor Output for Headphone		Rotate
64	VDD	VDD +5V		

IC461 RC78M05FA / IC462 RC7812FA (3-Terminal Voltage Regulated Power Supply)